

A schematic diagram of a vertical assembly. At the bottom, a horizontal line is labeled 7. A vertical dashed line extends upwards from this line. Along this line, several components are stacked: a large rectangle labeled 1, a smaller rectangle labeled 6, and another rectangle labeled 2. Above rectangle 2 is a small rectangle labeled 5. At the top of the assembly is a dashed rectangular box labeled 9. Inside this box, there are two horizontal double-headed arrows, labeled 4 and 3 from top to bottom. Wavy lines connect the labels 1, 2, 3, 4, 5, 6, and 7 to their respective components.

FIG. 2(a)

FIG. 2(b)

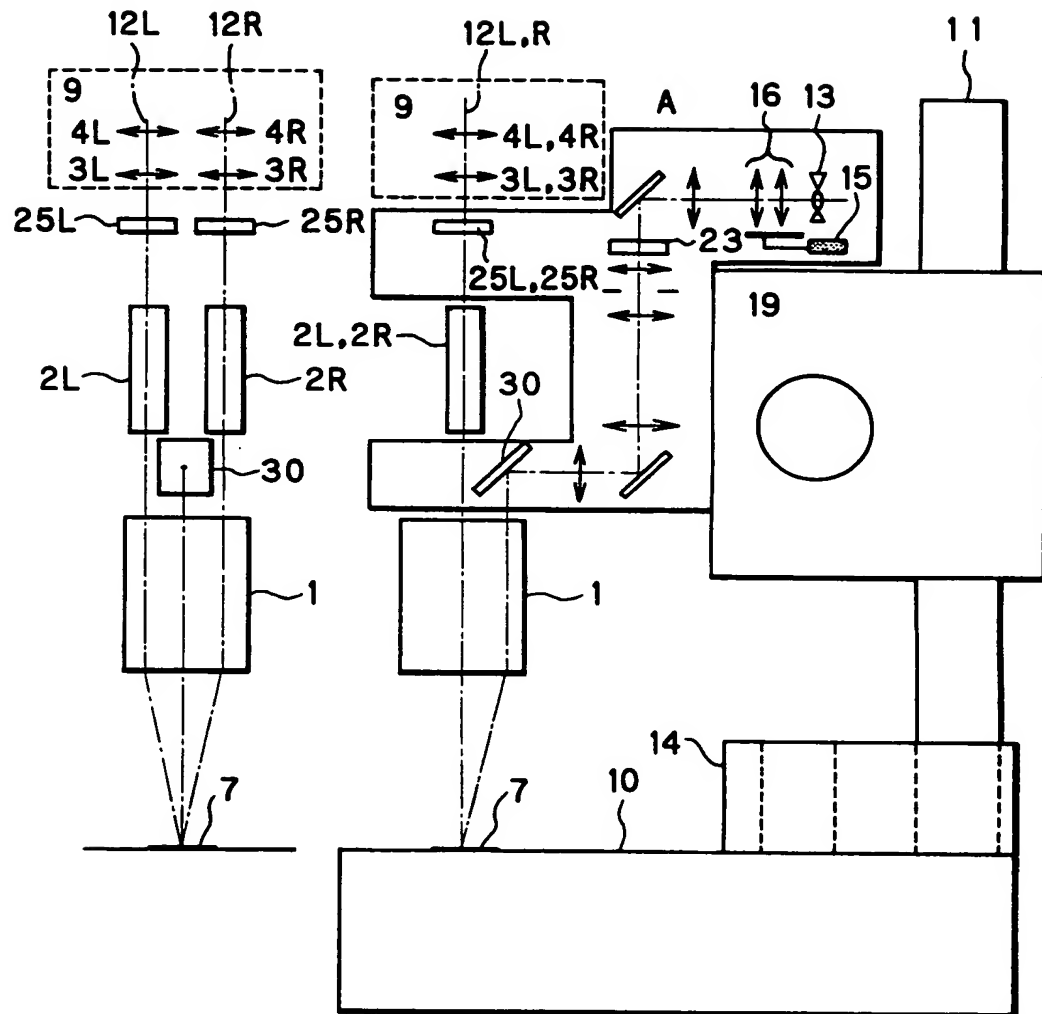


FIG. 3(a)

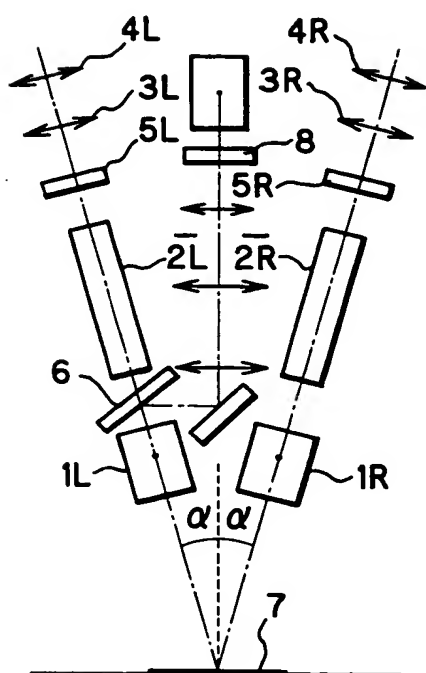


FIG. 3(b)

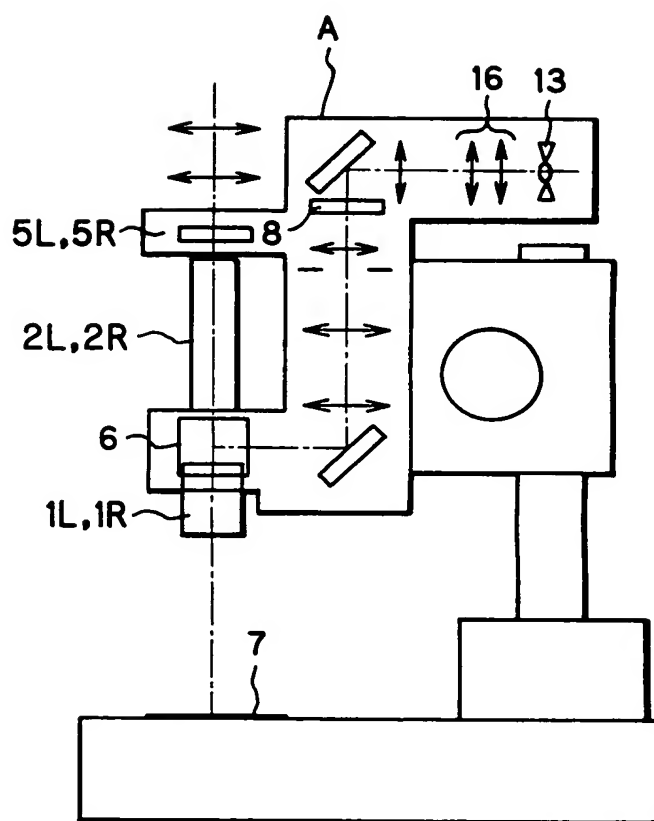


FIG. 4(a)

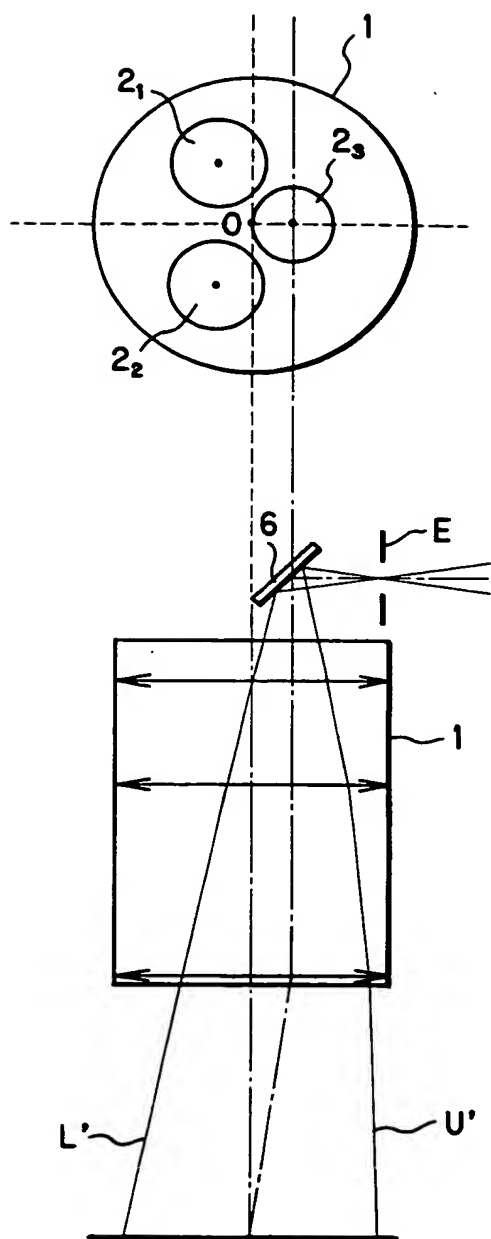


FIG. 4(b)

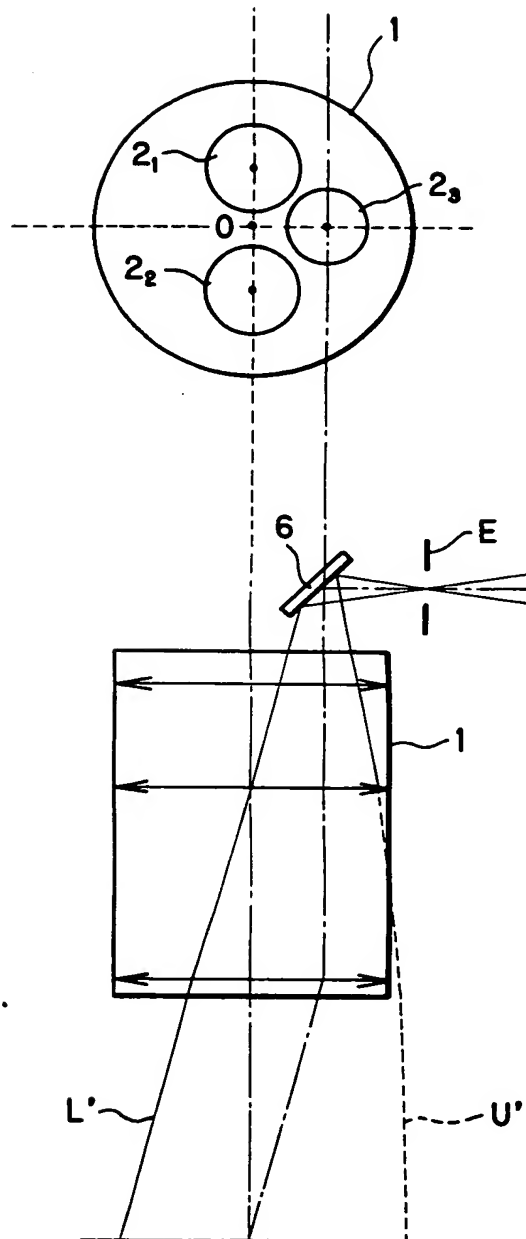


FIG. 5(a)

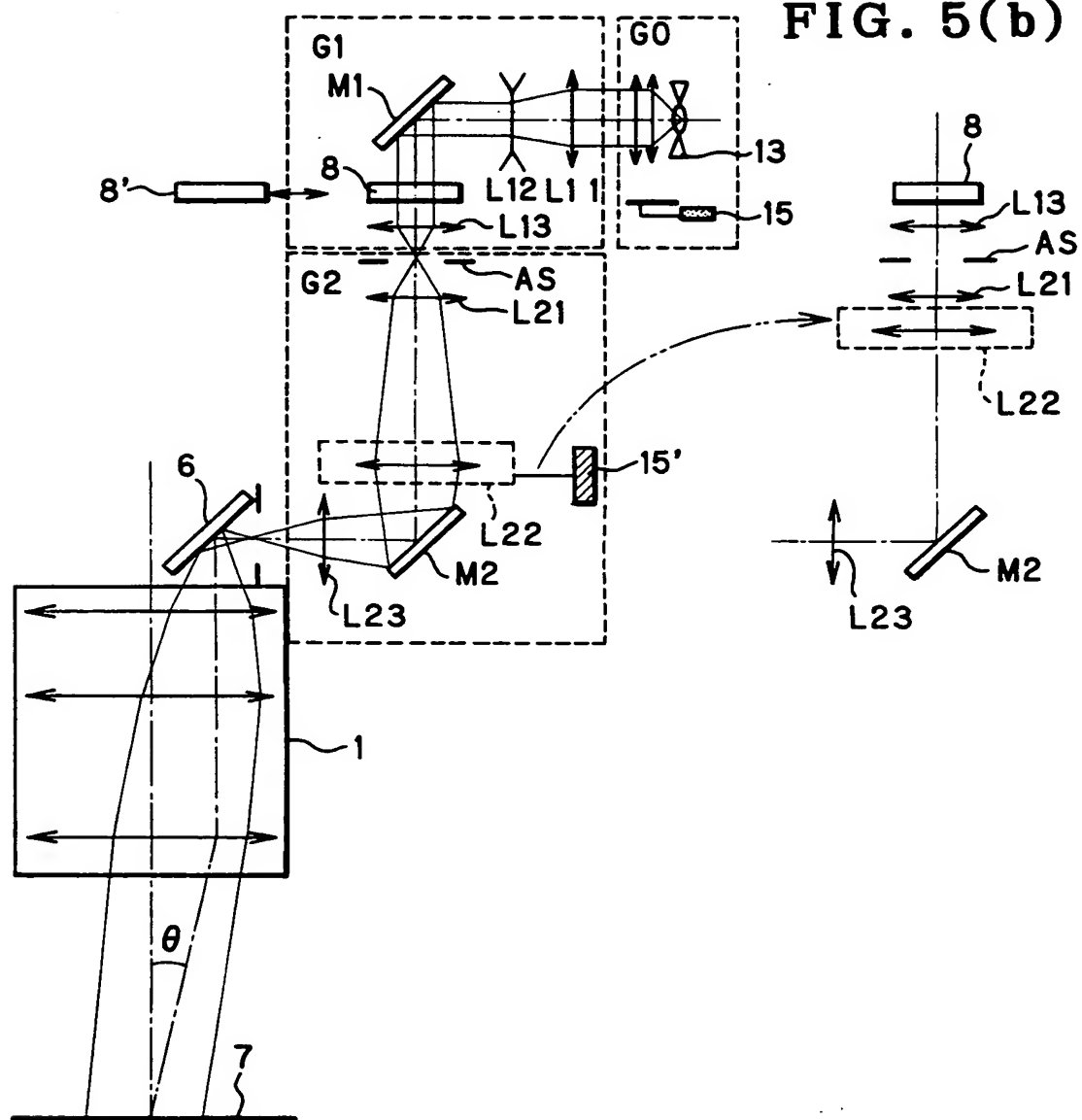


FIG. 6(b)

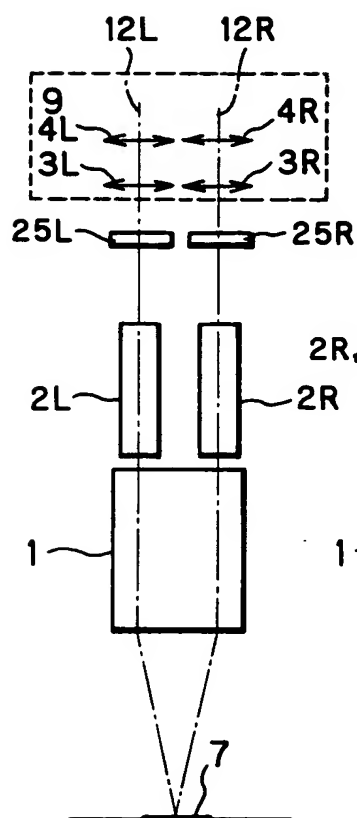


FIG. 6(a)

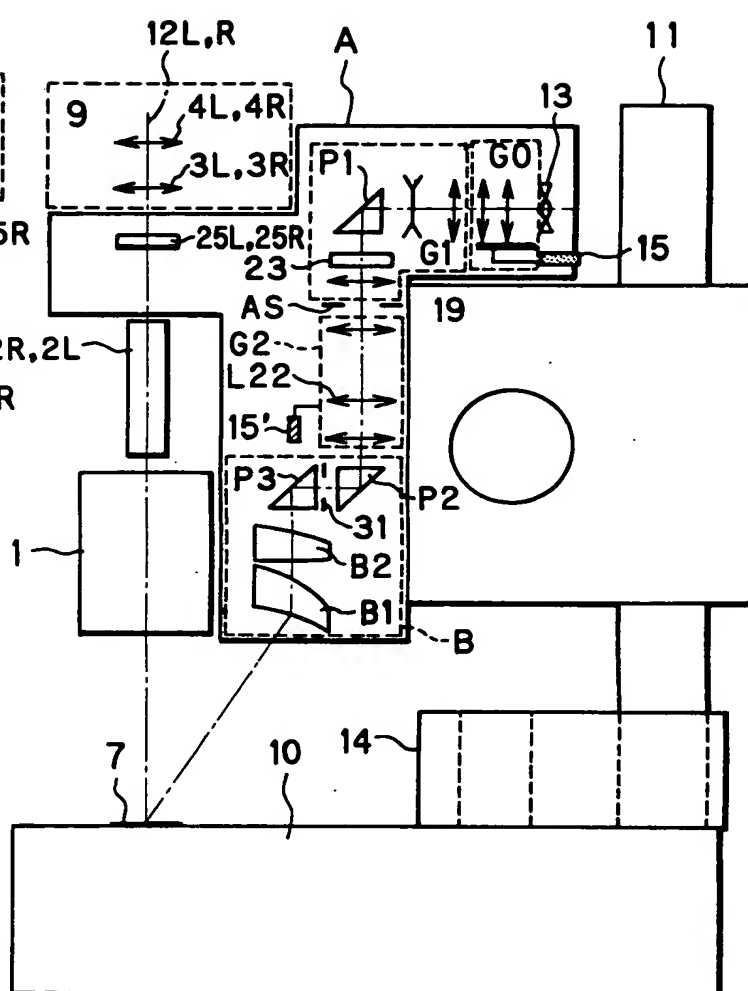


FIG. 7(a)

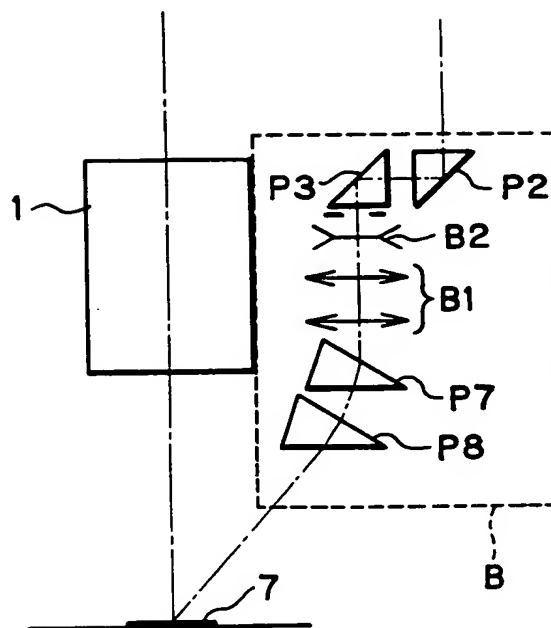


FIG. 7(b)

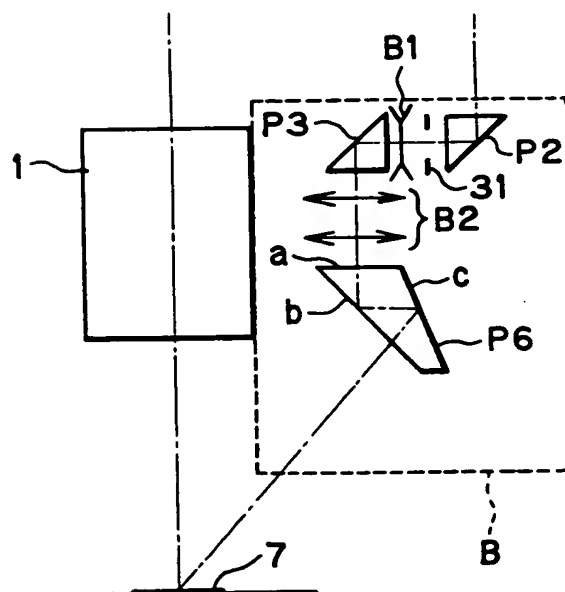


FIG. 8(a)

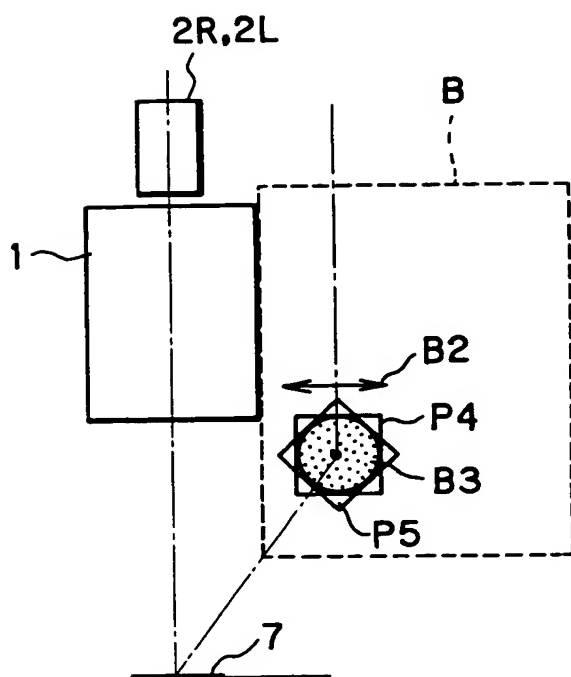


FIG. 8(b)

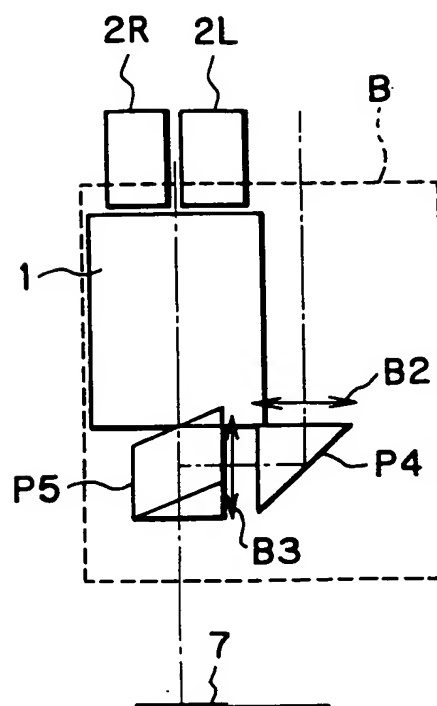


FIG. 8(c)

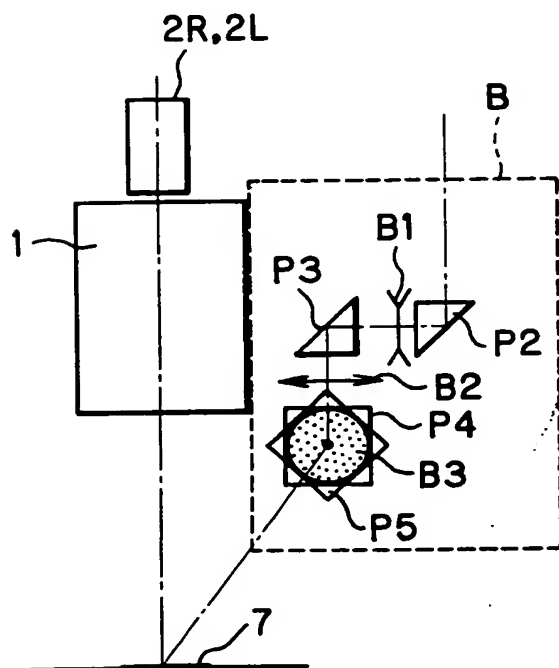


FIG. 8(d)

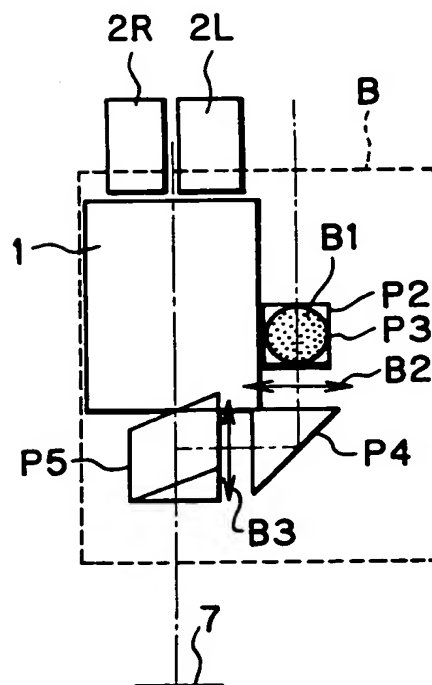


FIG. 9

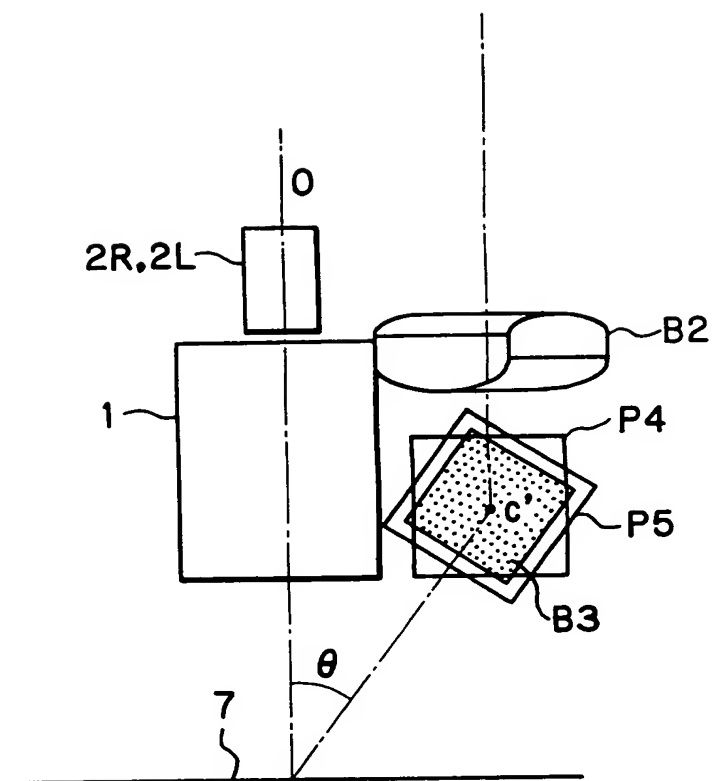
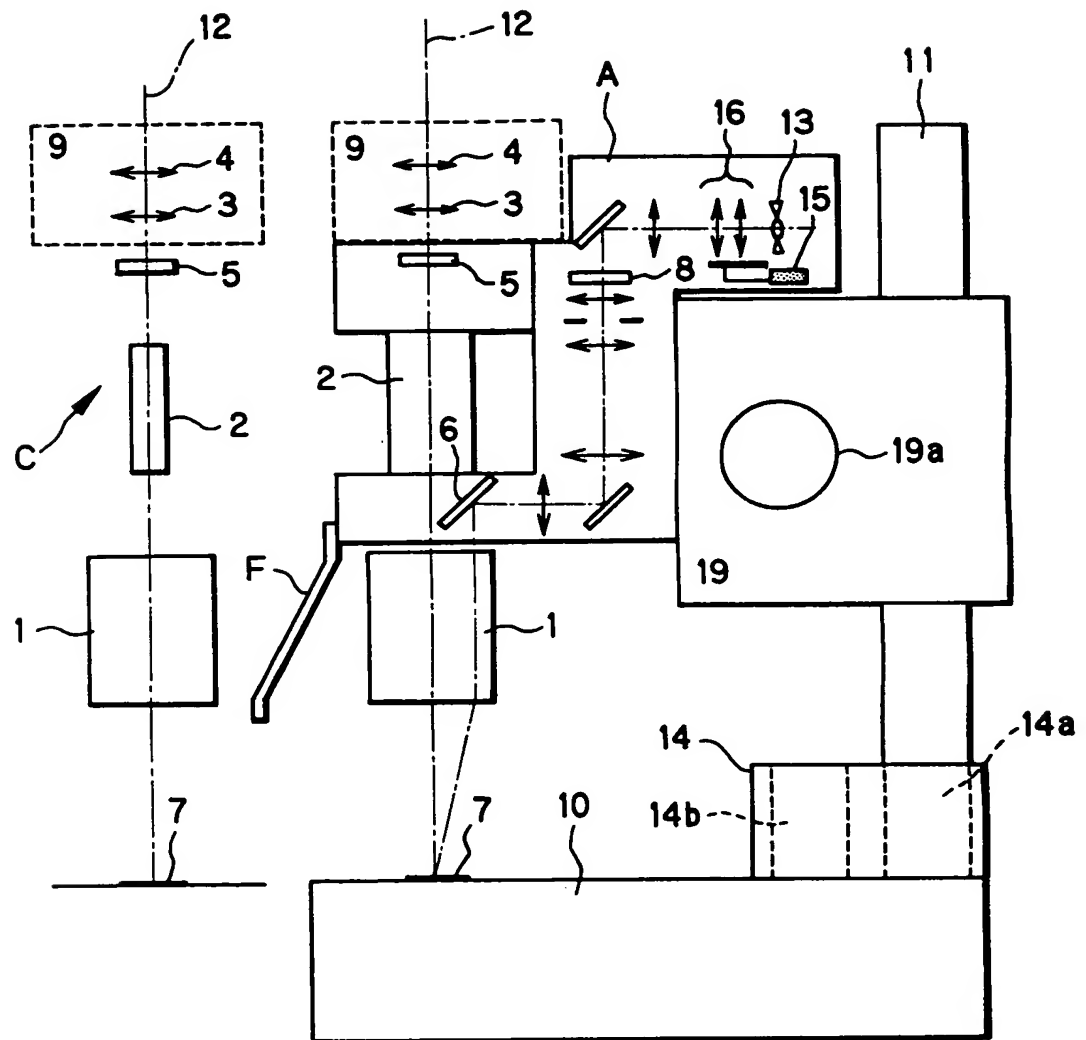


FIG. 10(a)

FIG. 10(b)



C

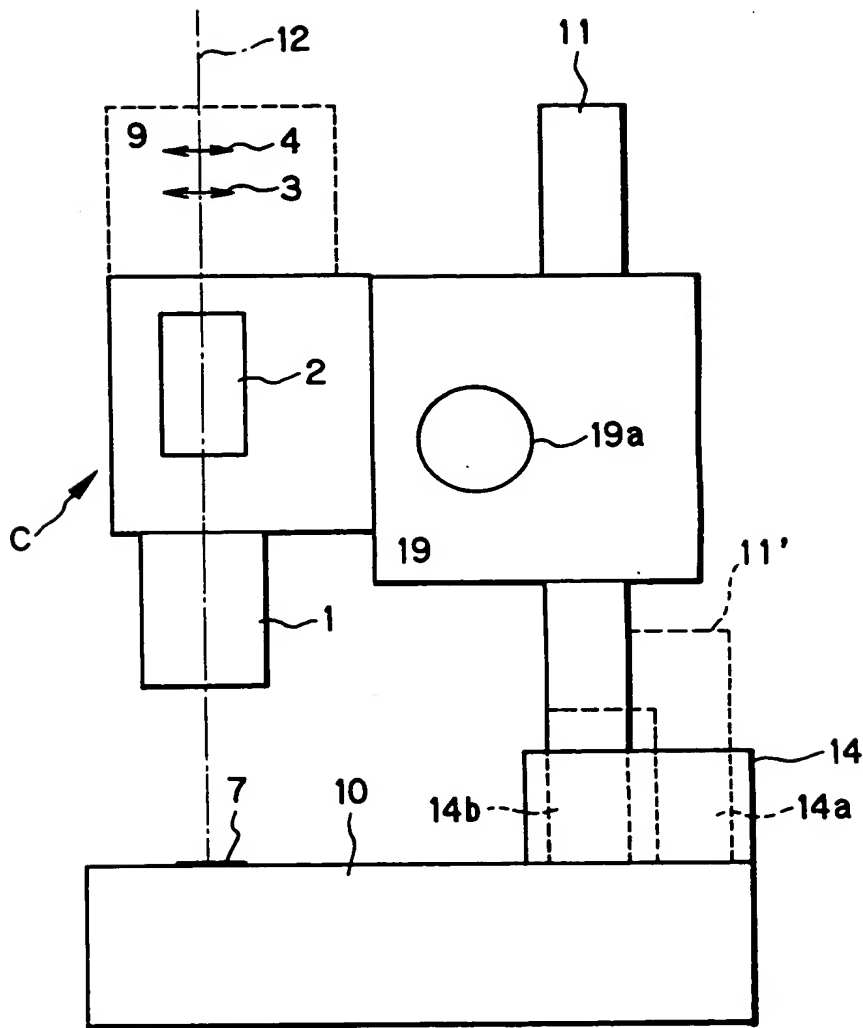


FIG. 11(b)

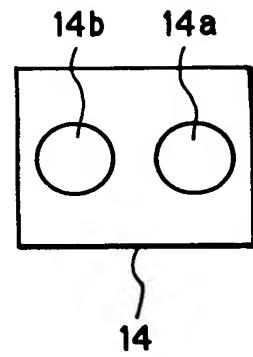


FIG. 12(a)

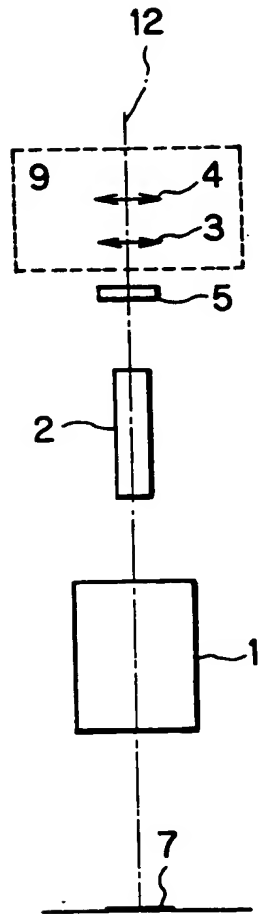


FIG. 12(b)

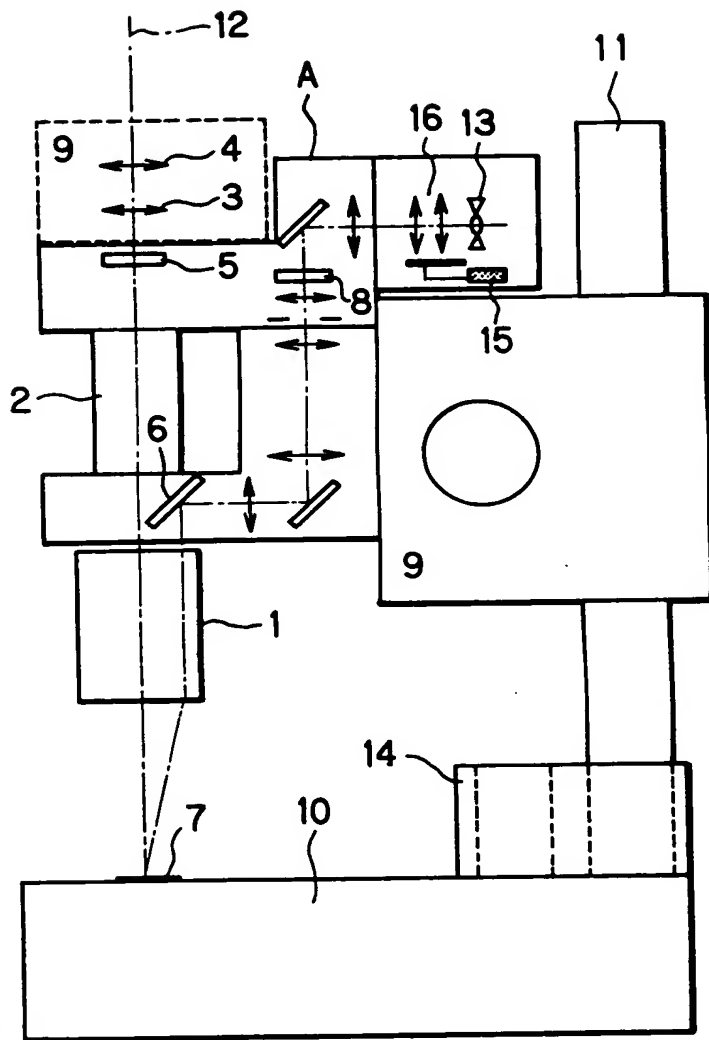


FIG. 13(a)

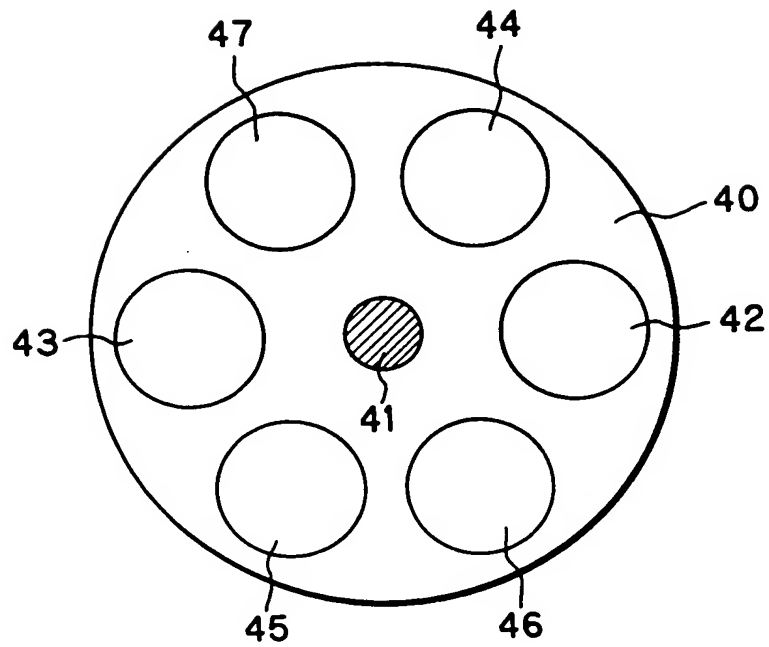


FIG. 13(b)

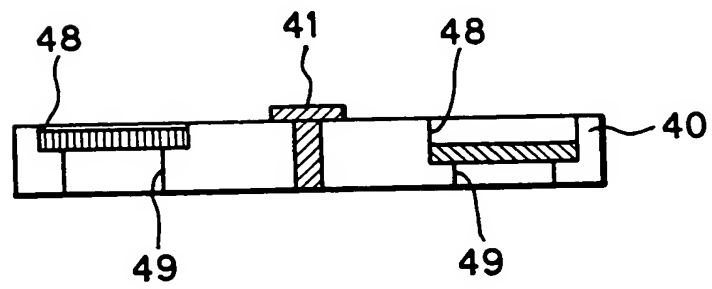


FIG. 14(a)

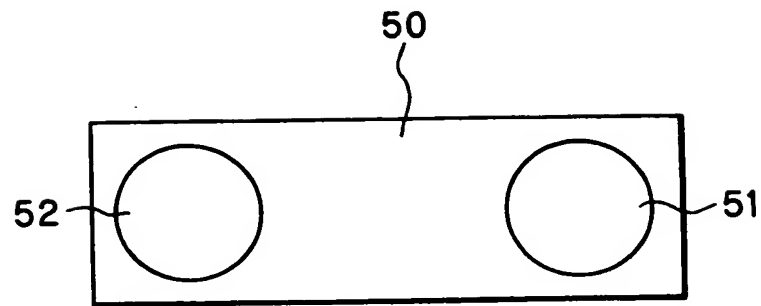


FIG. 14(b)

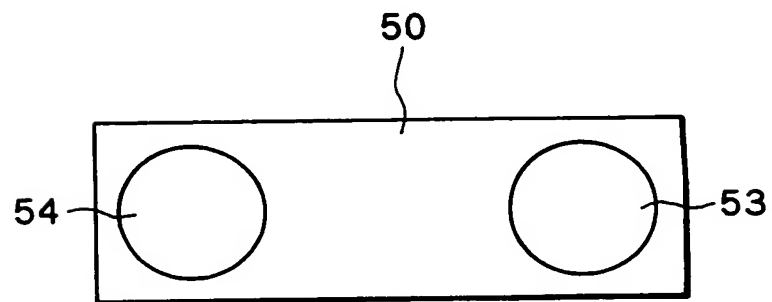
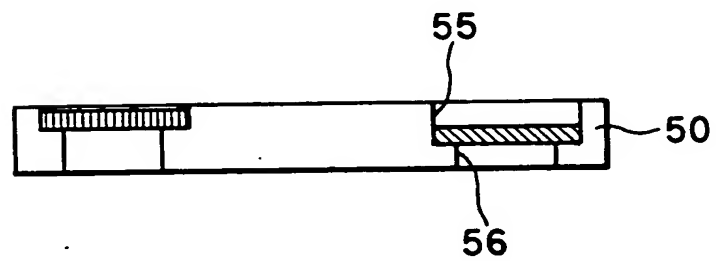


FIG. 14(c)



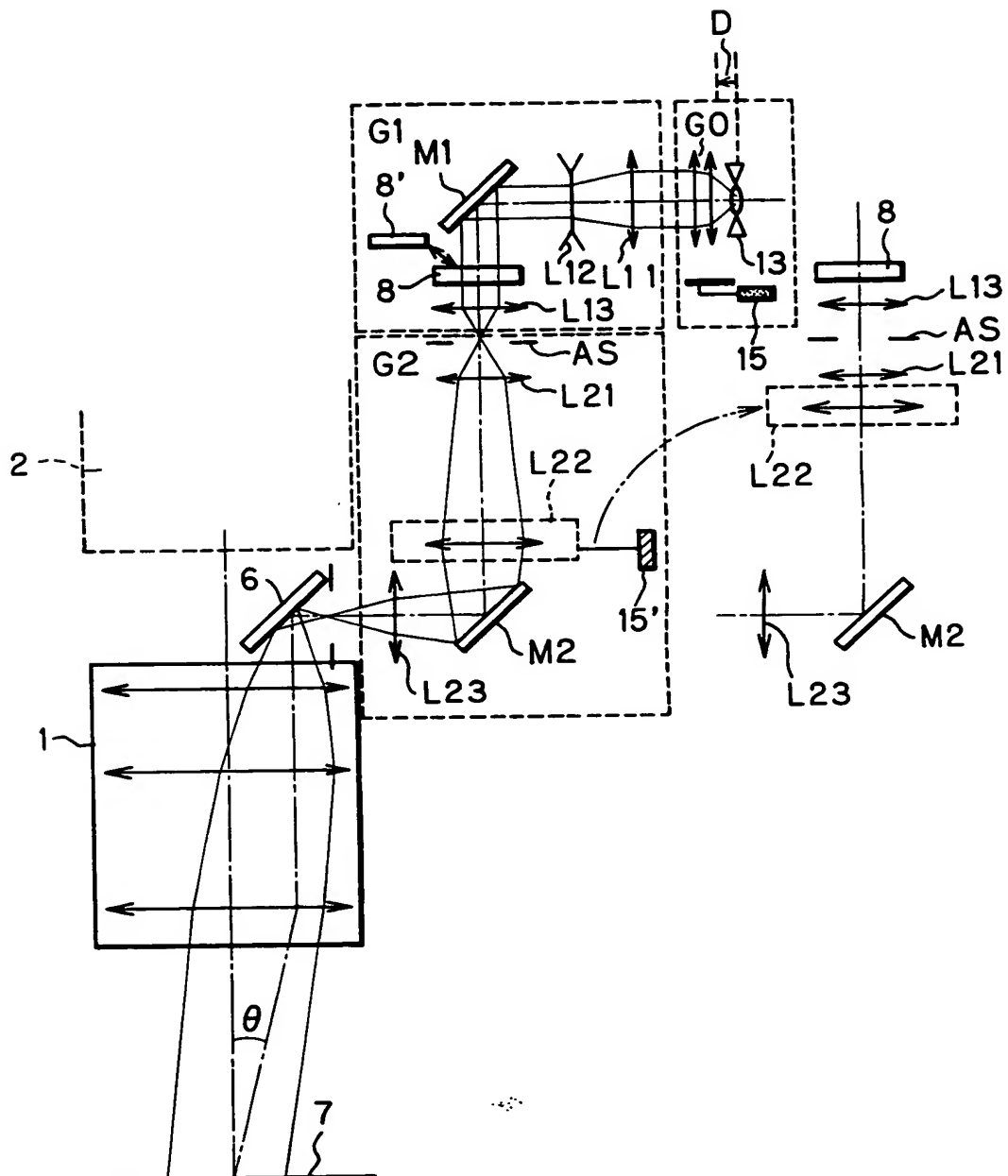


FIG. 16

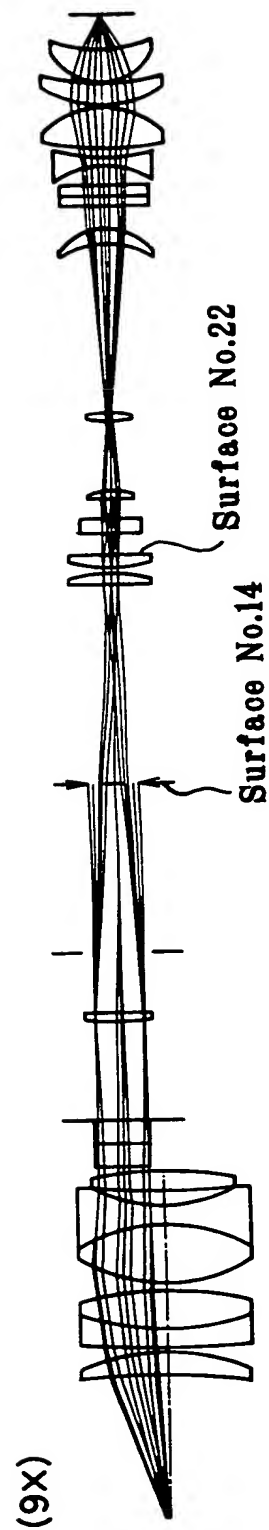
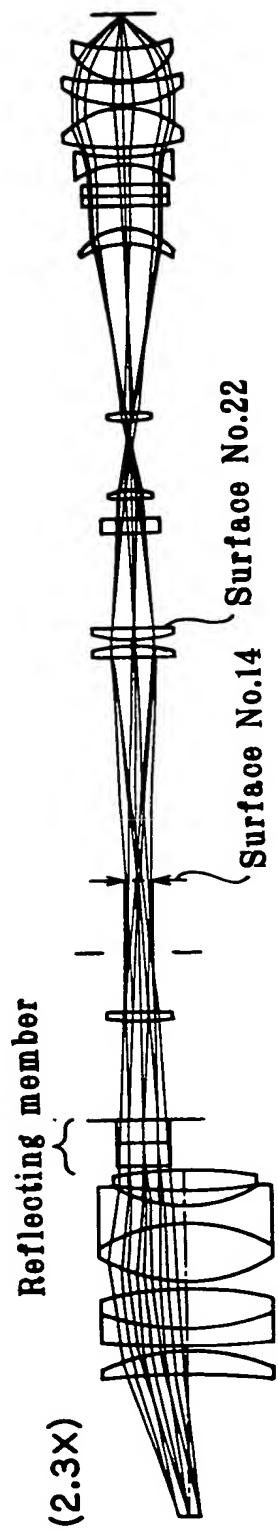
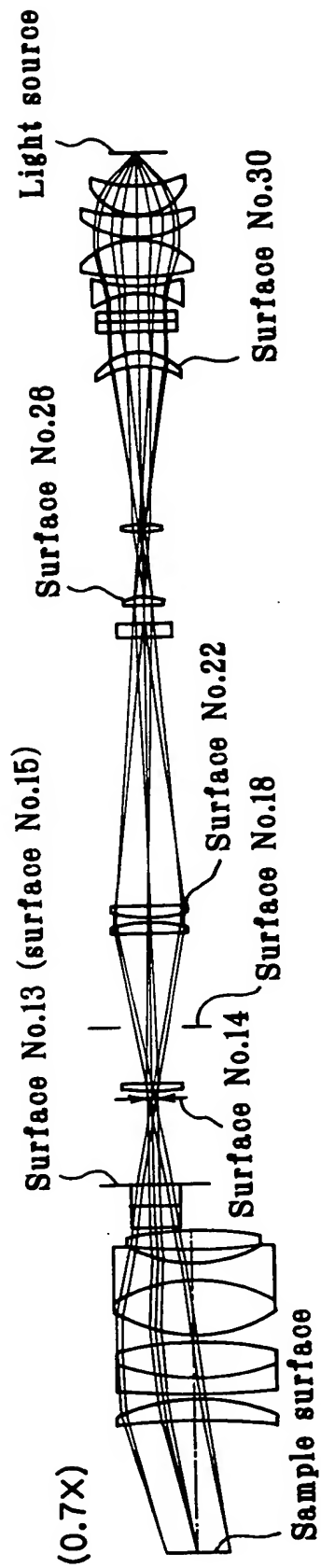


FIG. 17

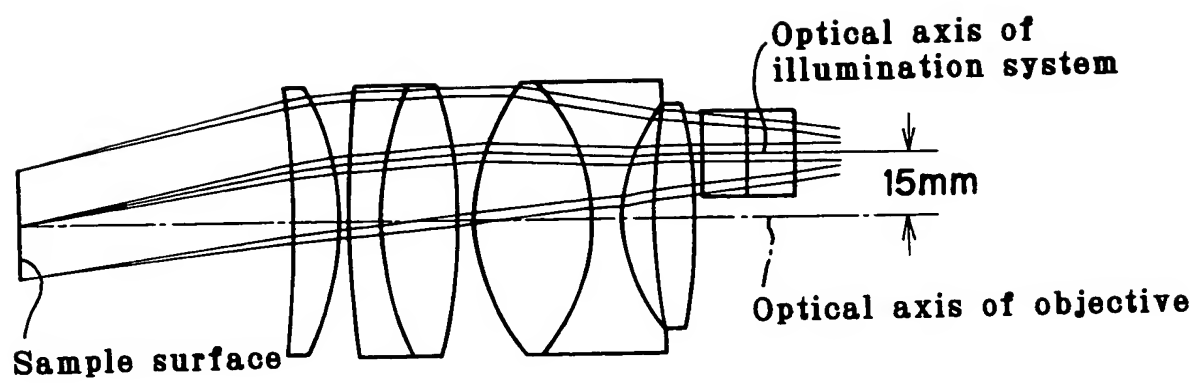


FIG. 18(a)

FIG. 18(b)

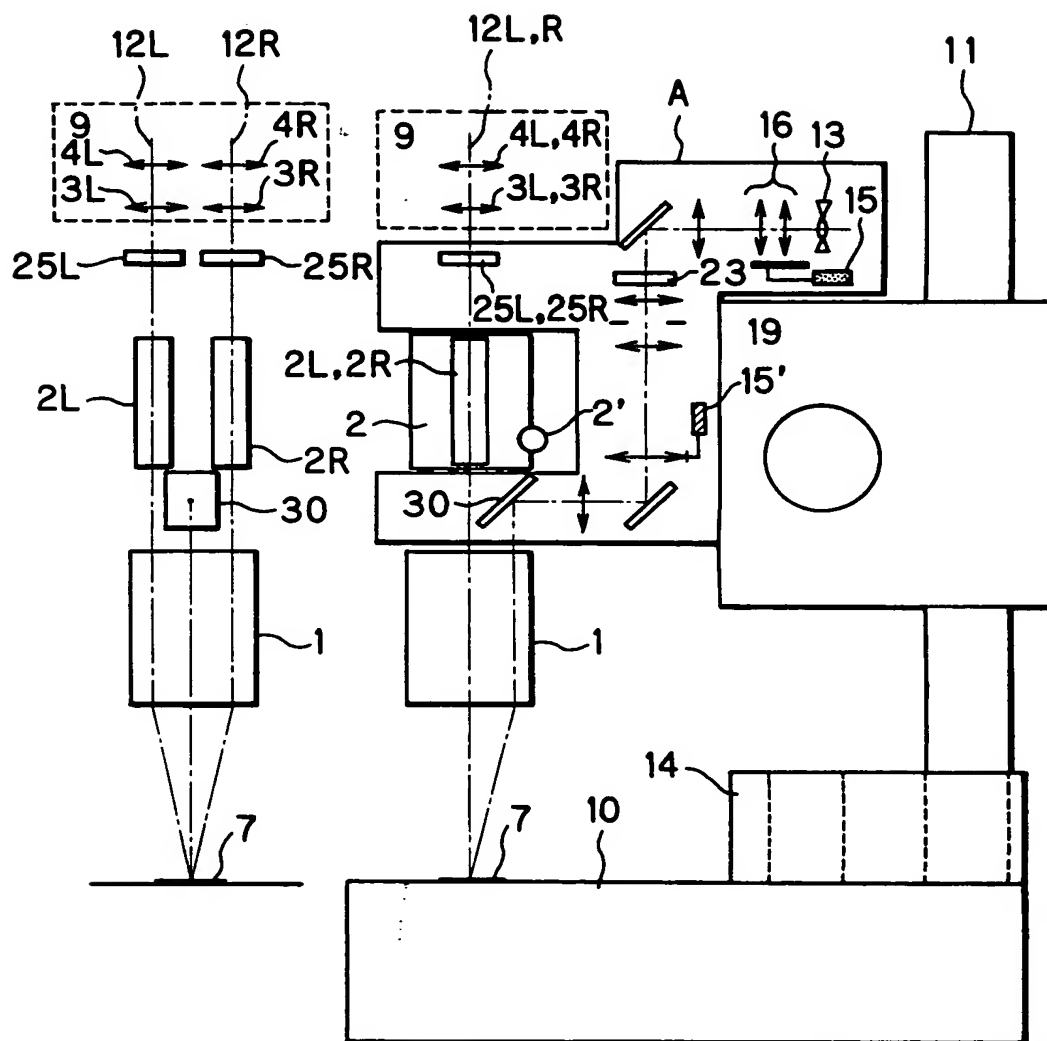


FIG. 19(a)

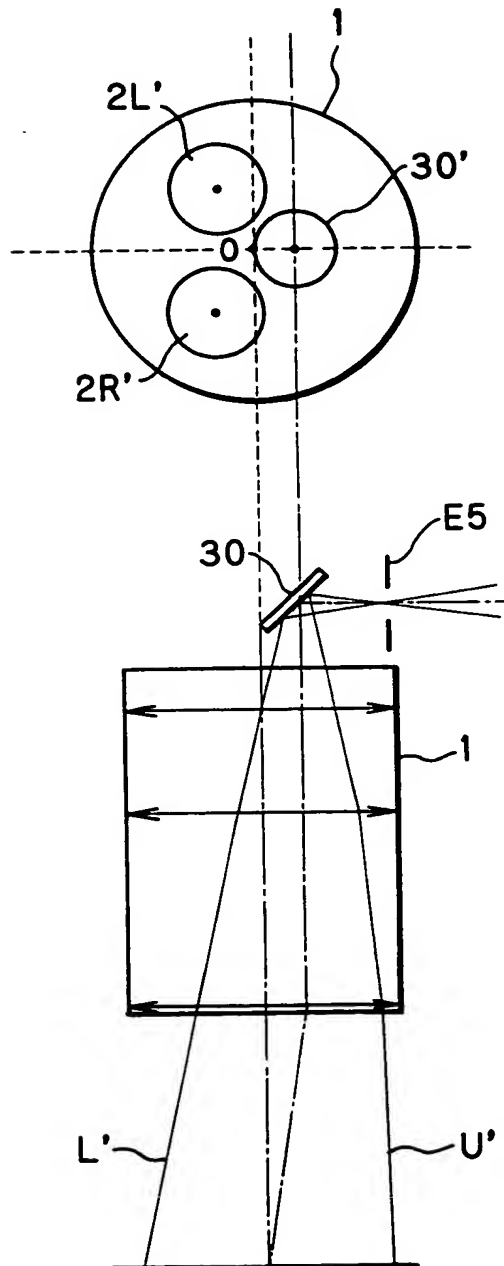


FIG. 19(b)

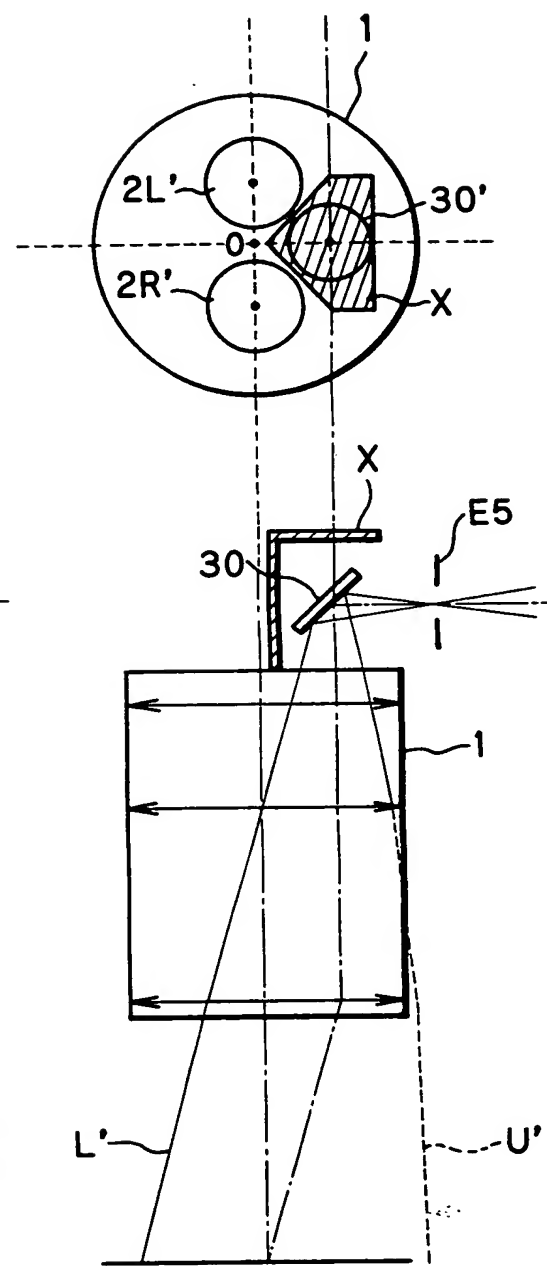


FIG. 20

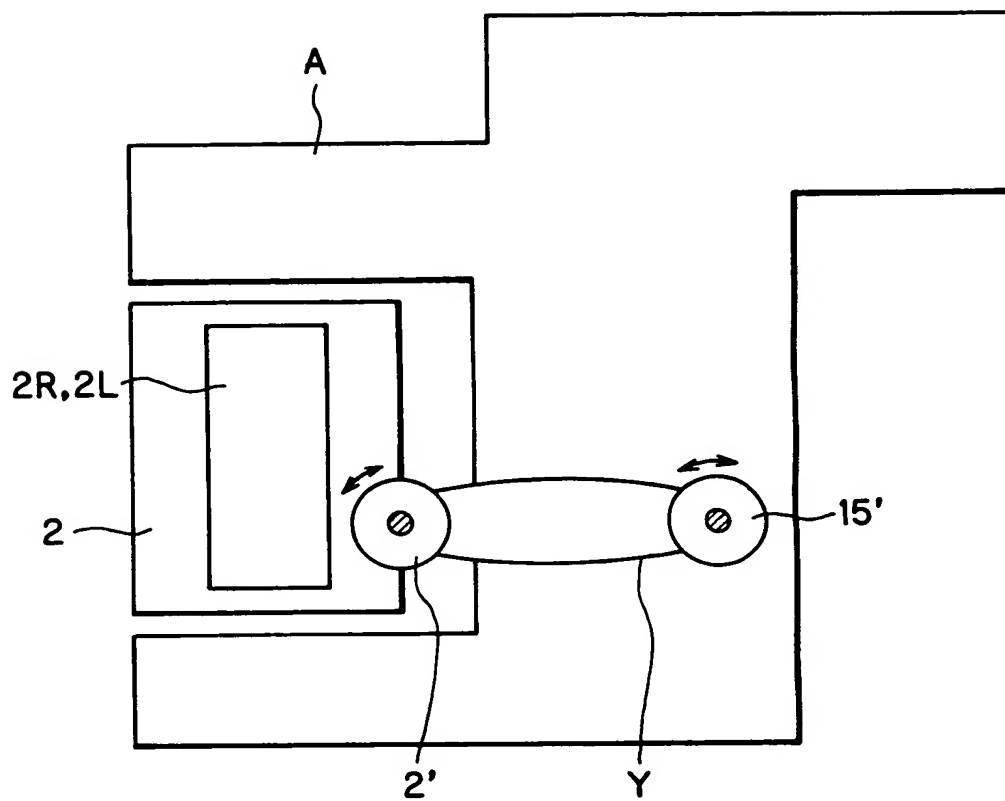


FIG. 21(a)

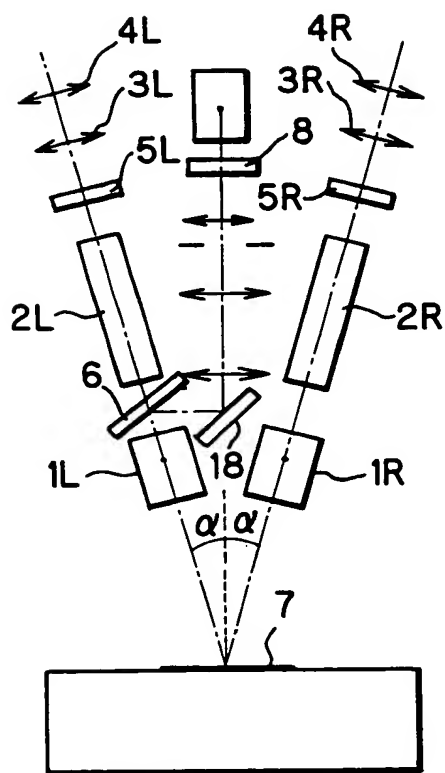


FIG. 21(b)

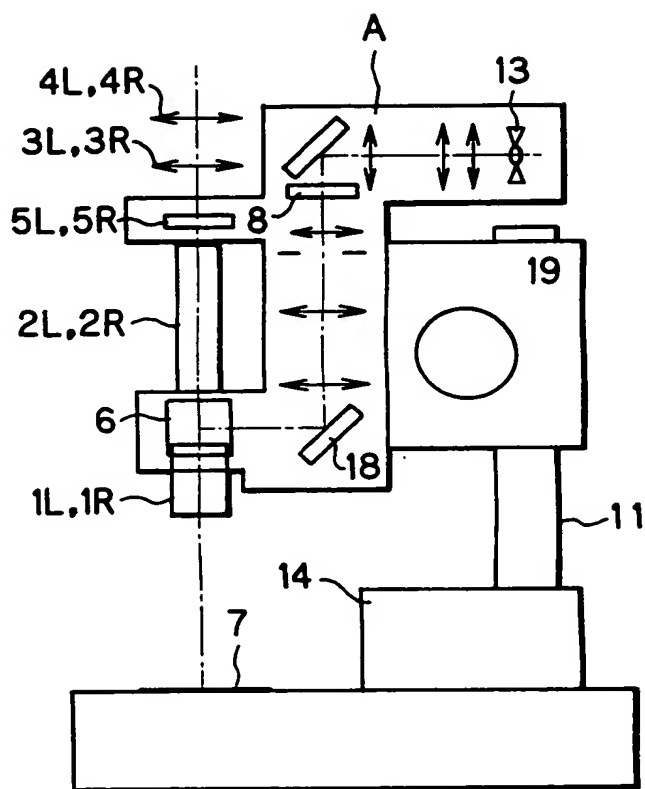


FIG. 22(a)

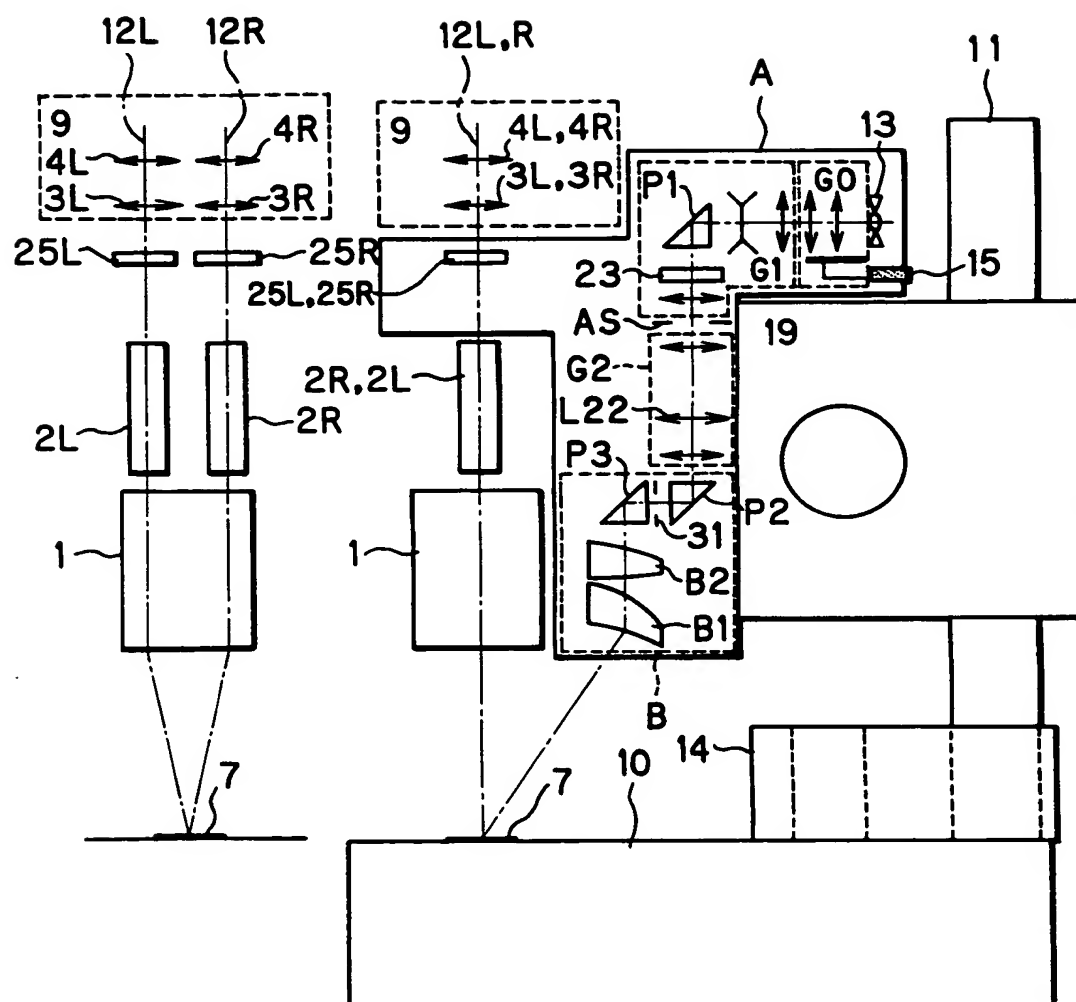
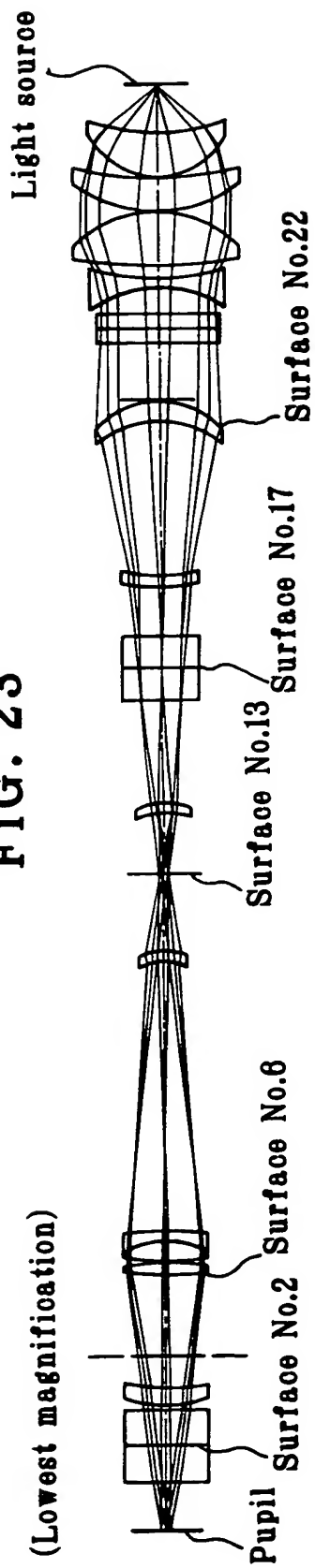
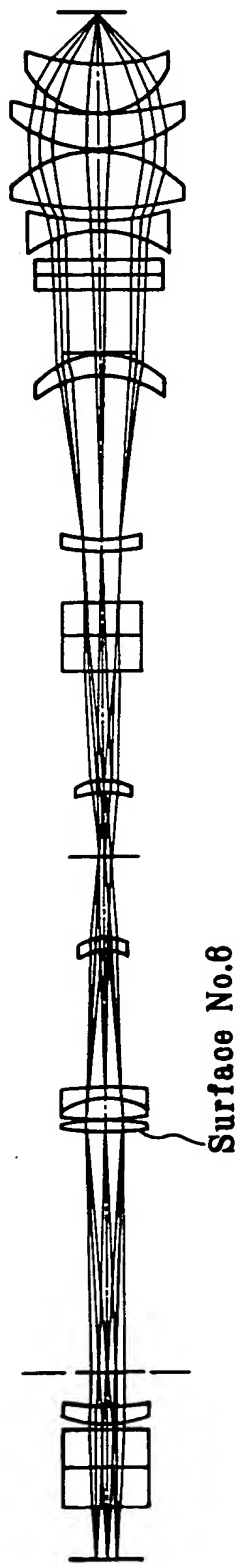


FIG. 23



(Intermediate magnification)



(Highest magnification)

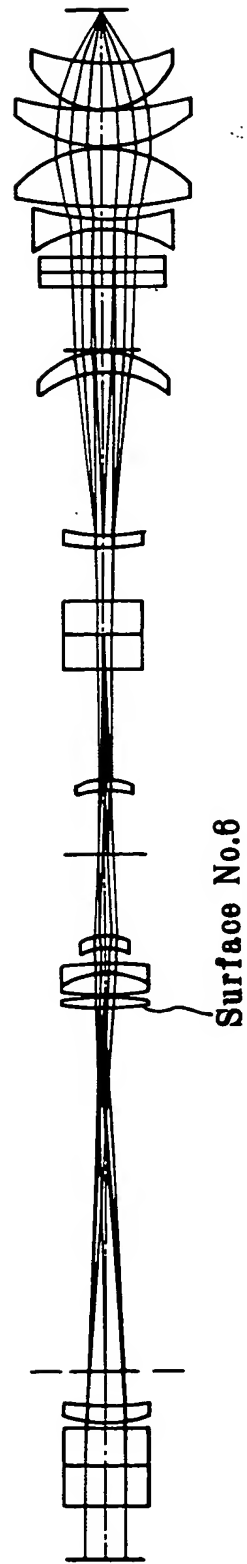
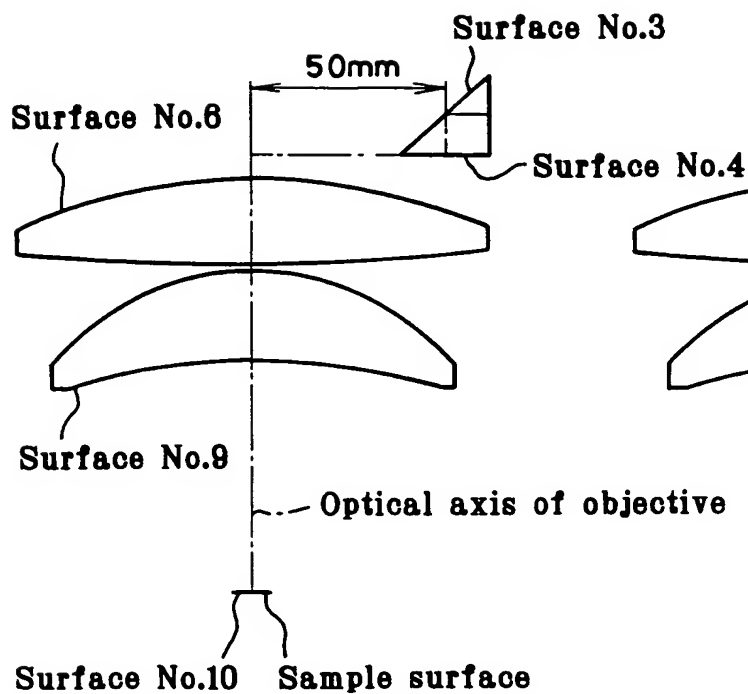
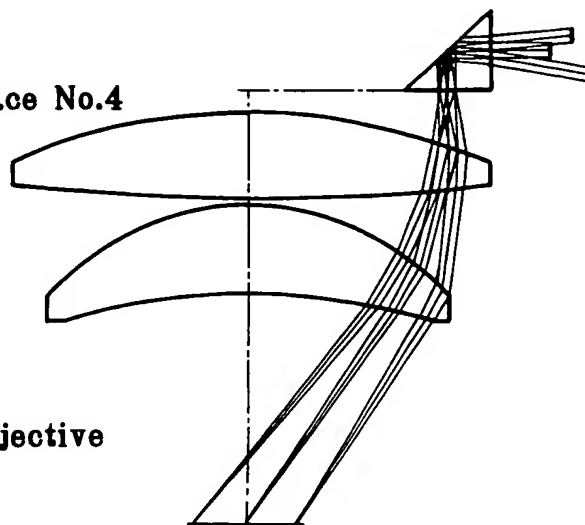


FIG. 24

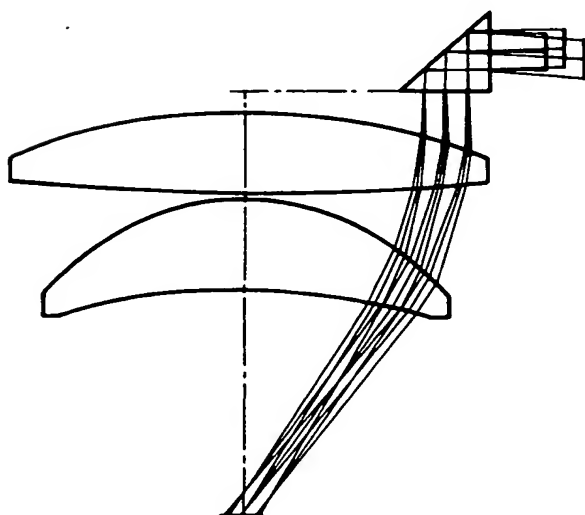
(Layout)



(Lowest magnification)



(Intermediate magnification)



(Highest magnification)

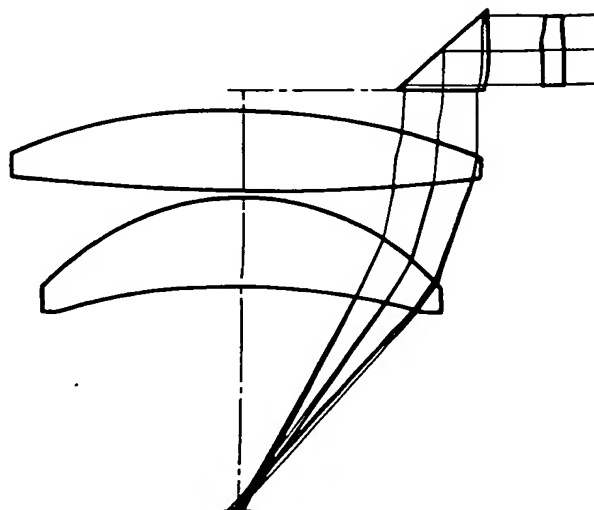


FIG. 25(a)

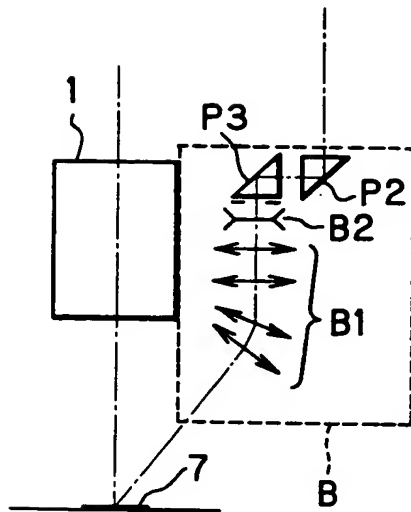


FIG. 25(b)

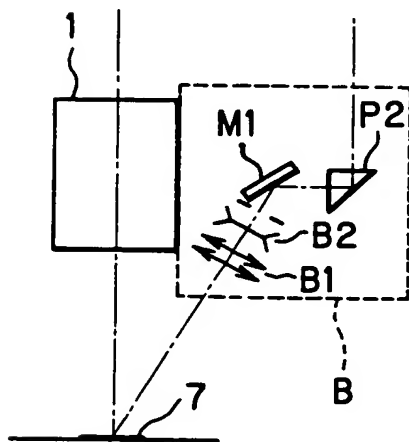


FIG. 25(c)

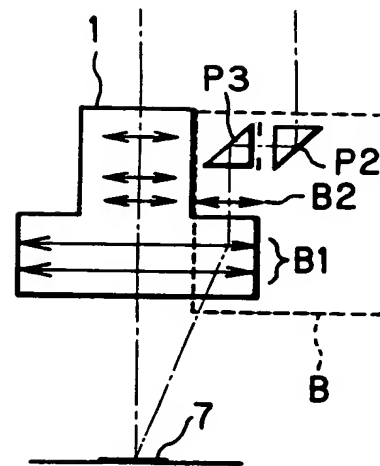


FIG. 26

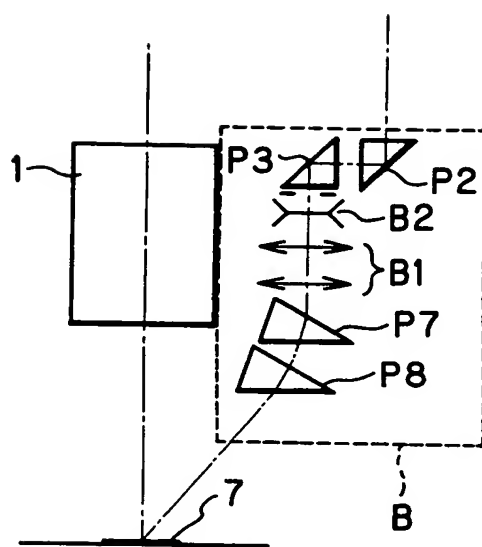
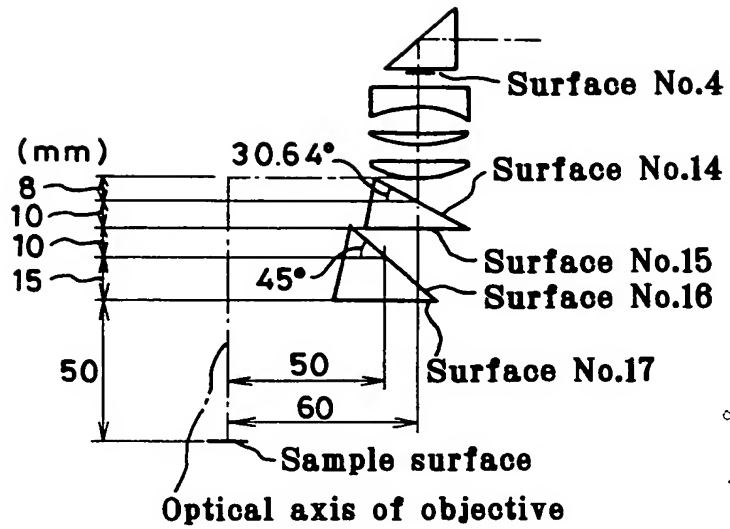
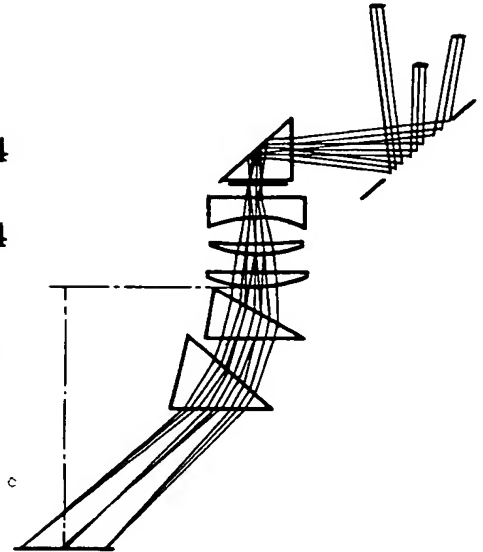


FIG. 27

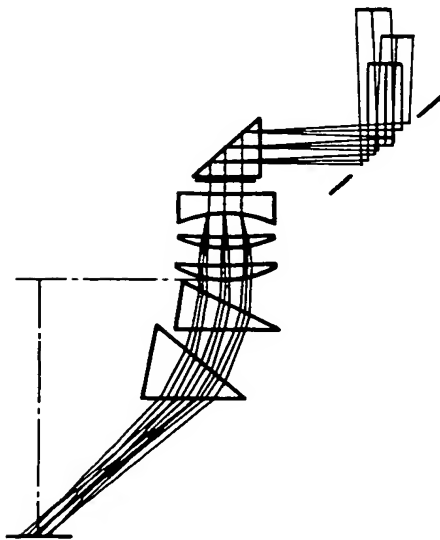
(Layout)



(Lowest magnification)



(Intermediate magnification)



(Highest magnification)

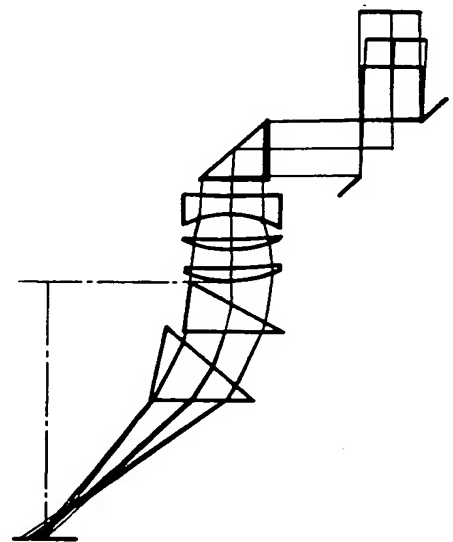


FIG. 28

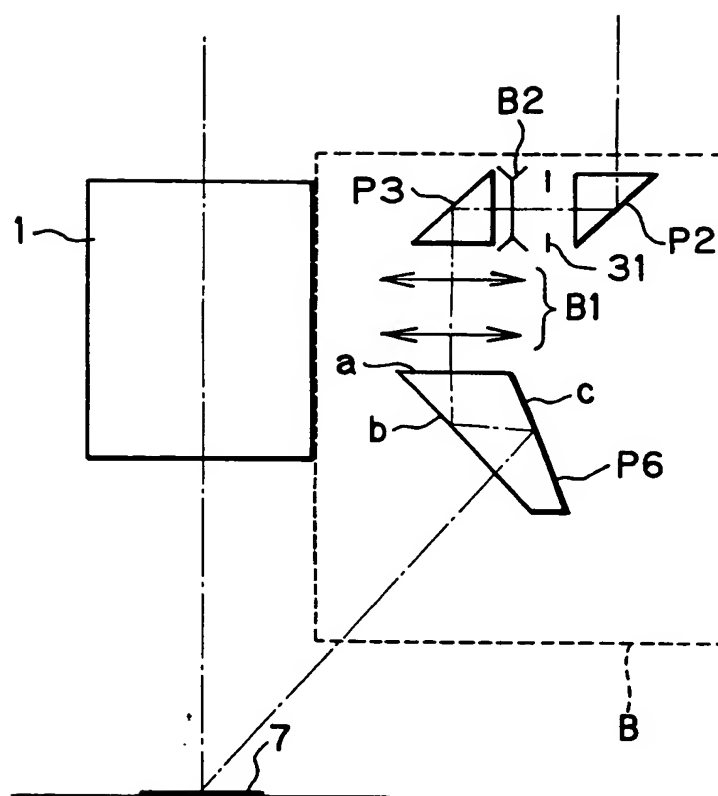
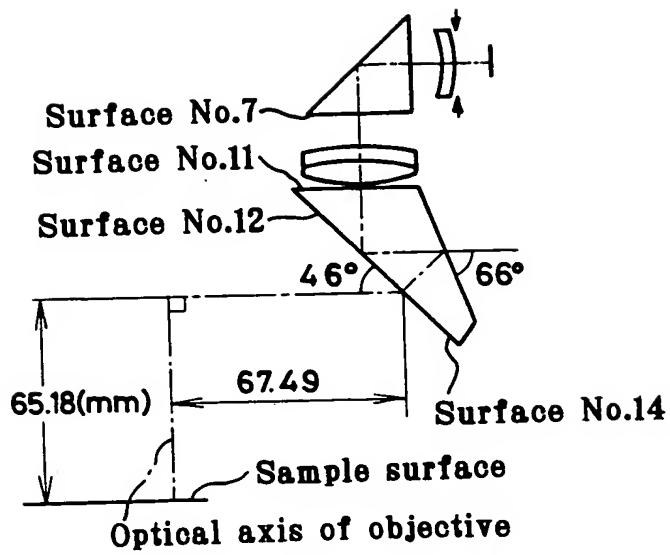
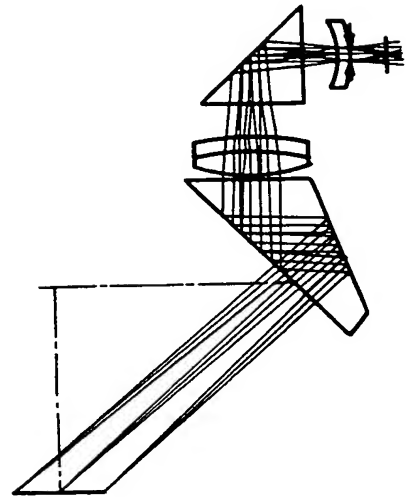


FIG. 29

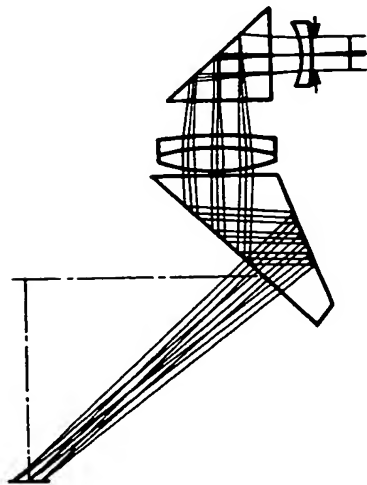
(Layout)



(Lowest magnification)



(Intermediate magnification)



(Highest magnification)

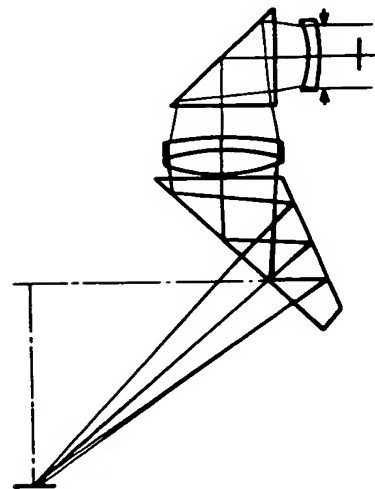


FIG. 30(a)

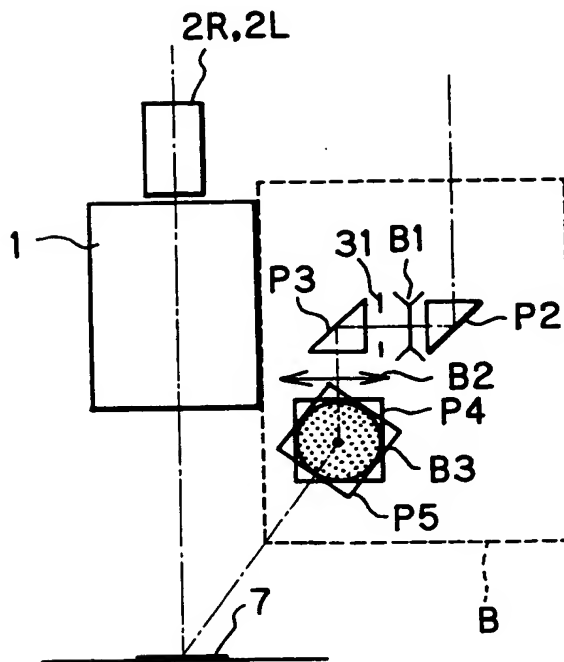


FIG. 30(b)

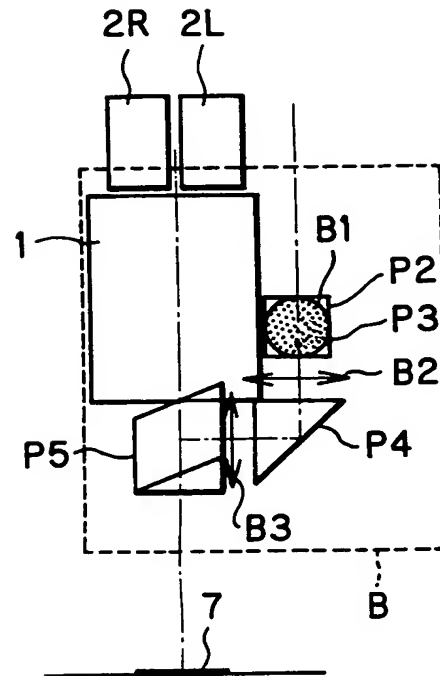


FIG. 30(c)

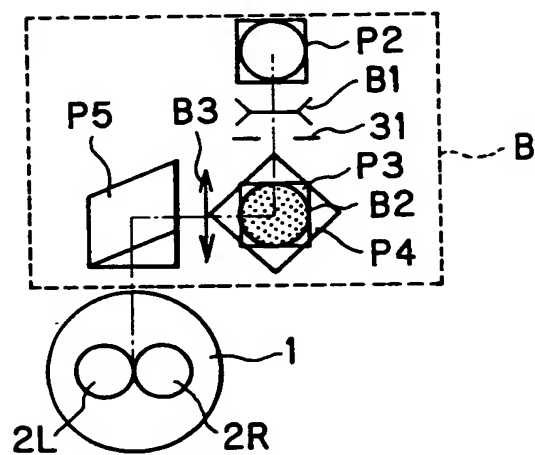
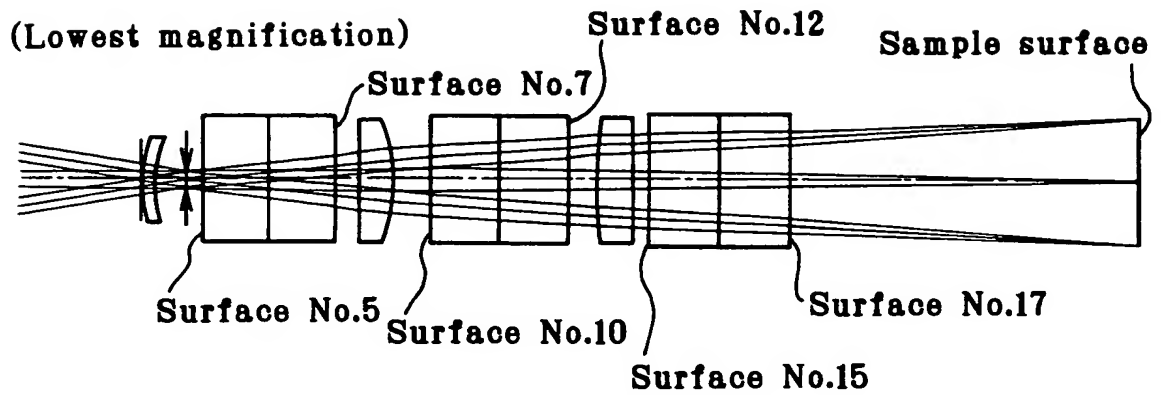
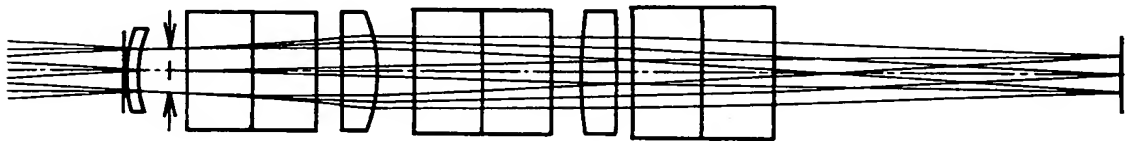


FIG. 31



(Intermediate magnification)



(Highest magnification)

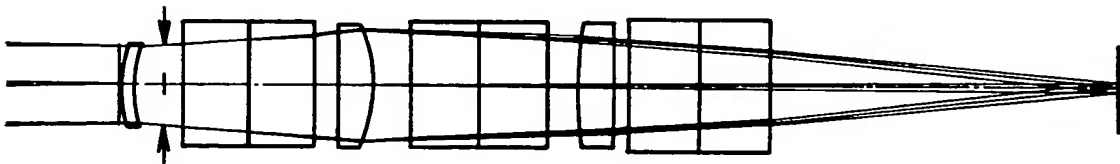


FIG. 32

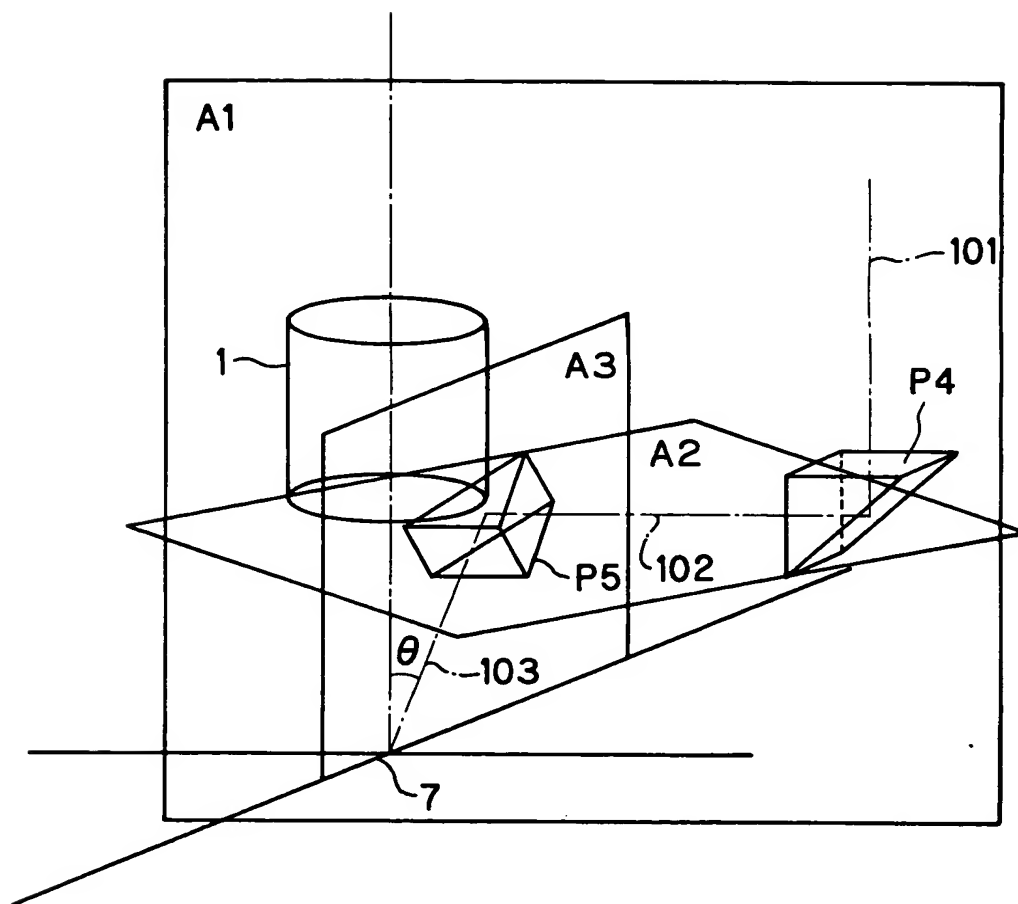


FIG. 33

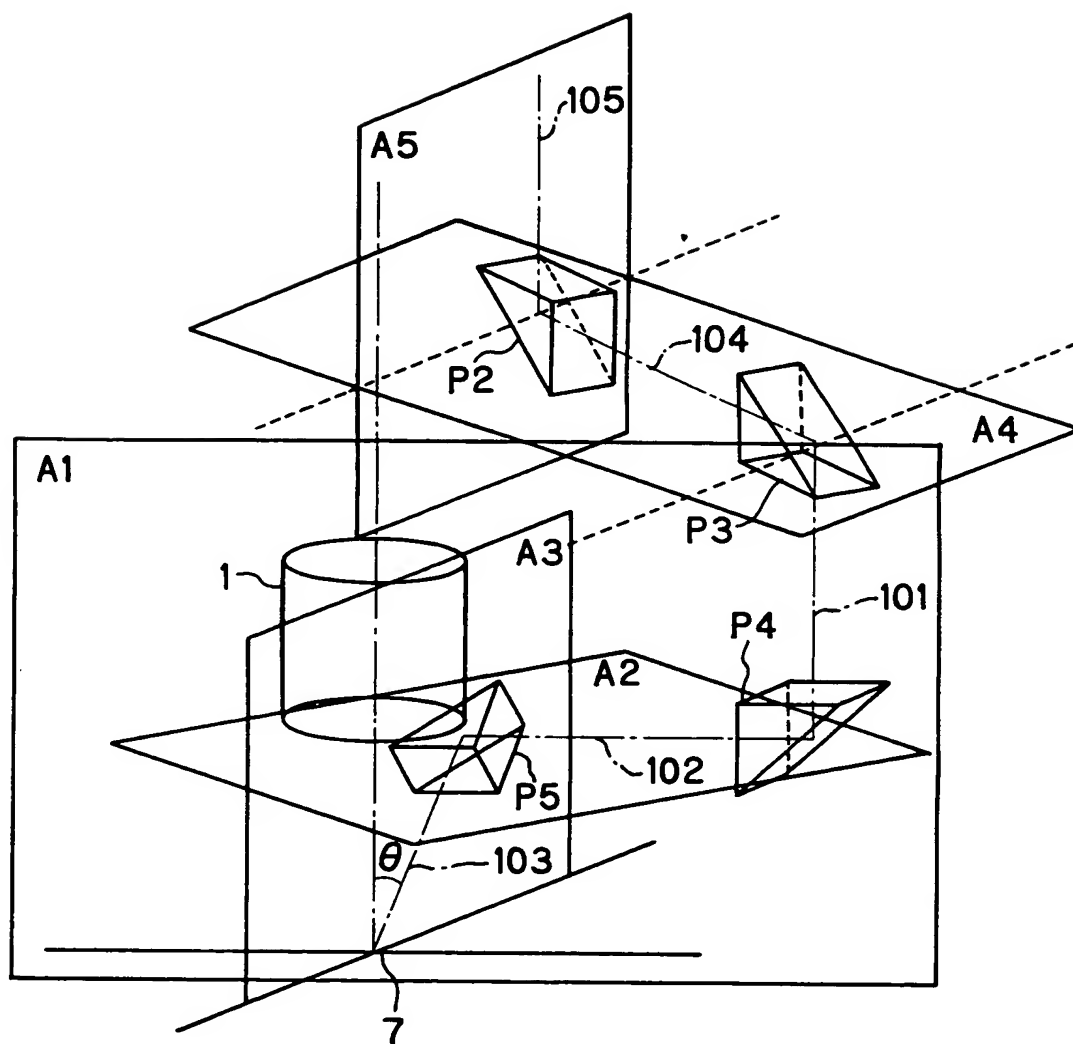


FIG. 34

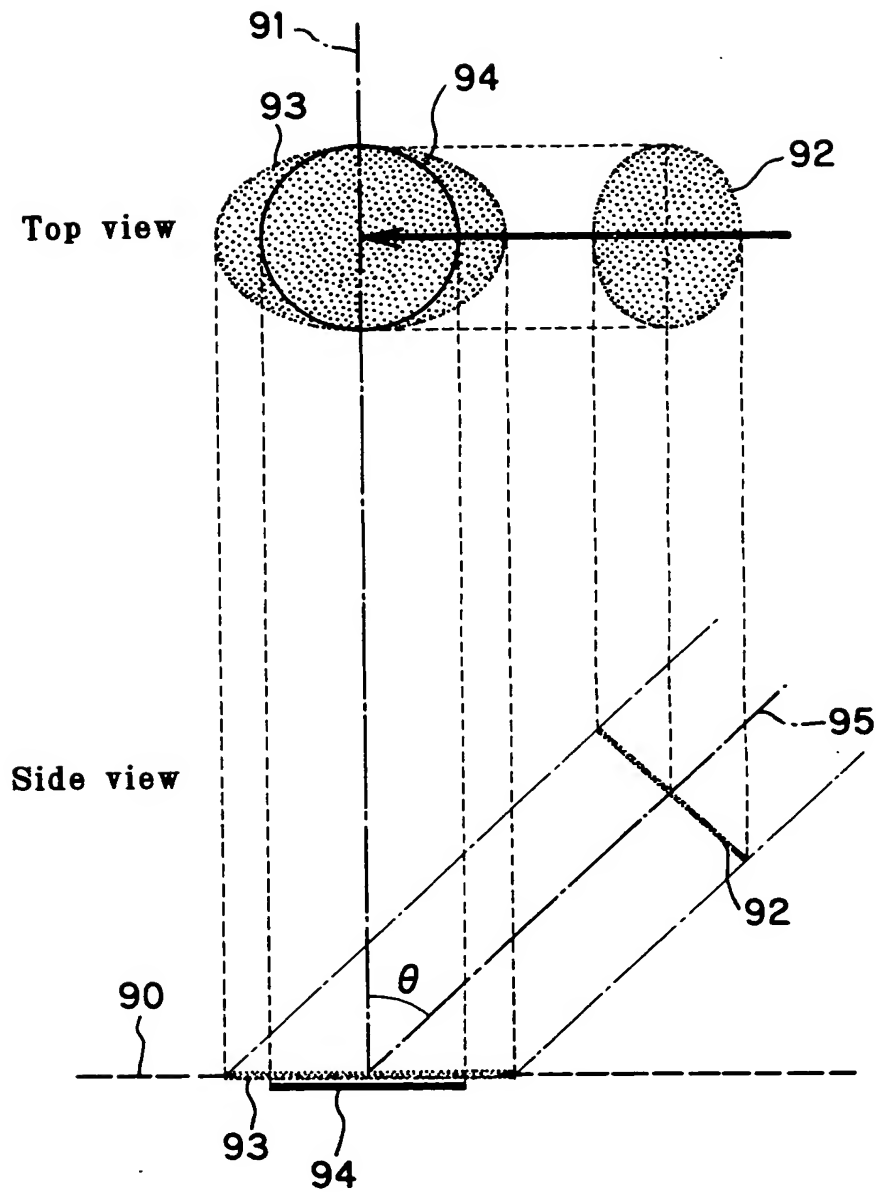


FIG. 35(a)

FIG. 35(b)

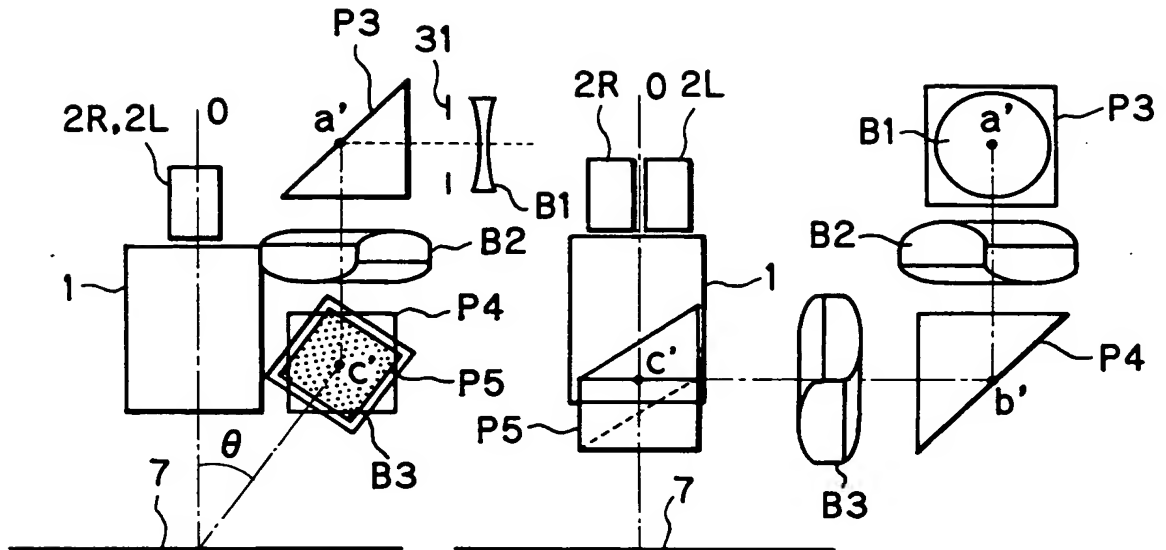


FIG. 35(c)

FIG. 35(d)

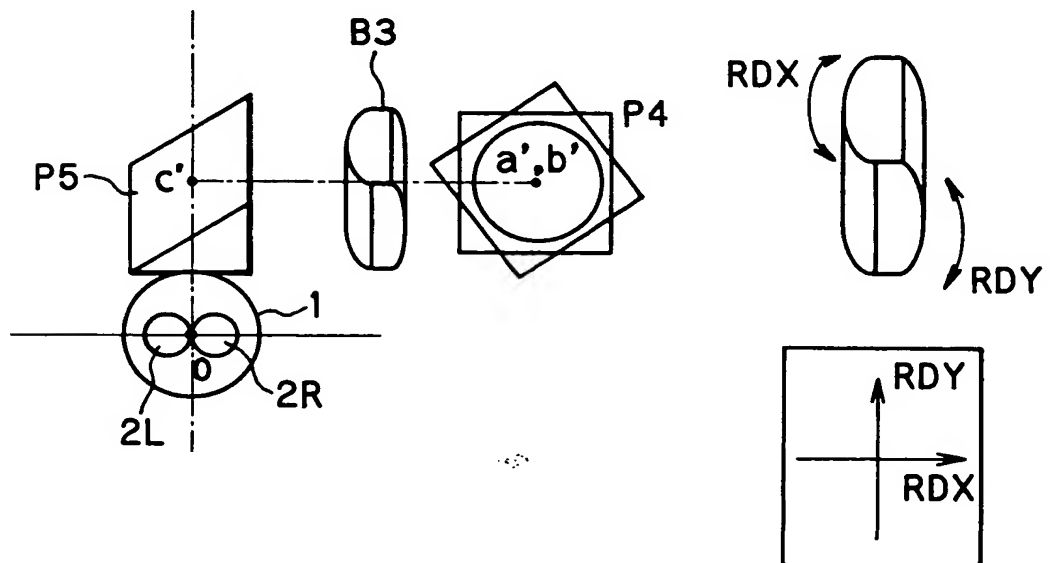


FIG. 36

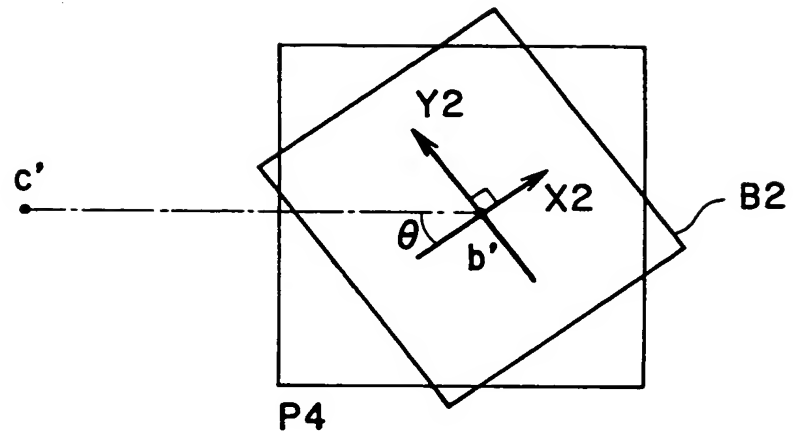


FIG. 37

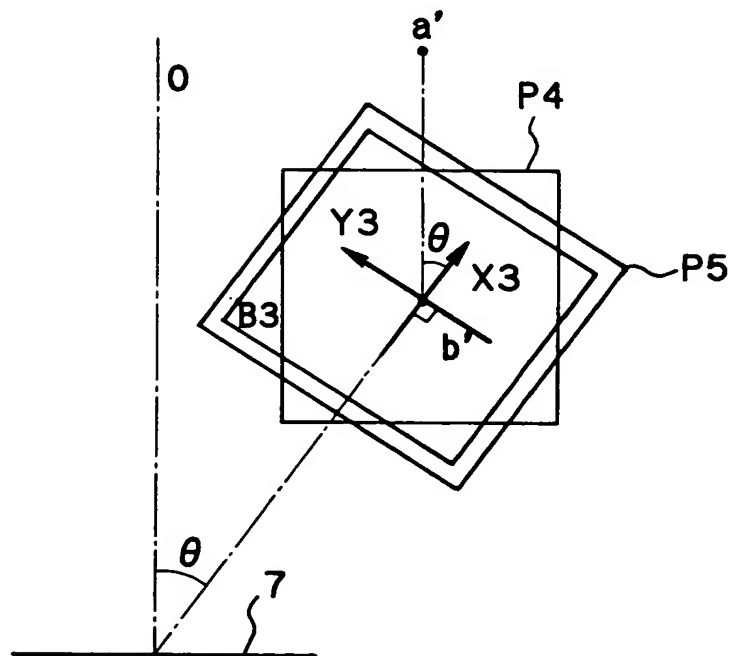


FIG. 38

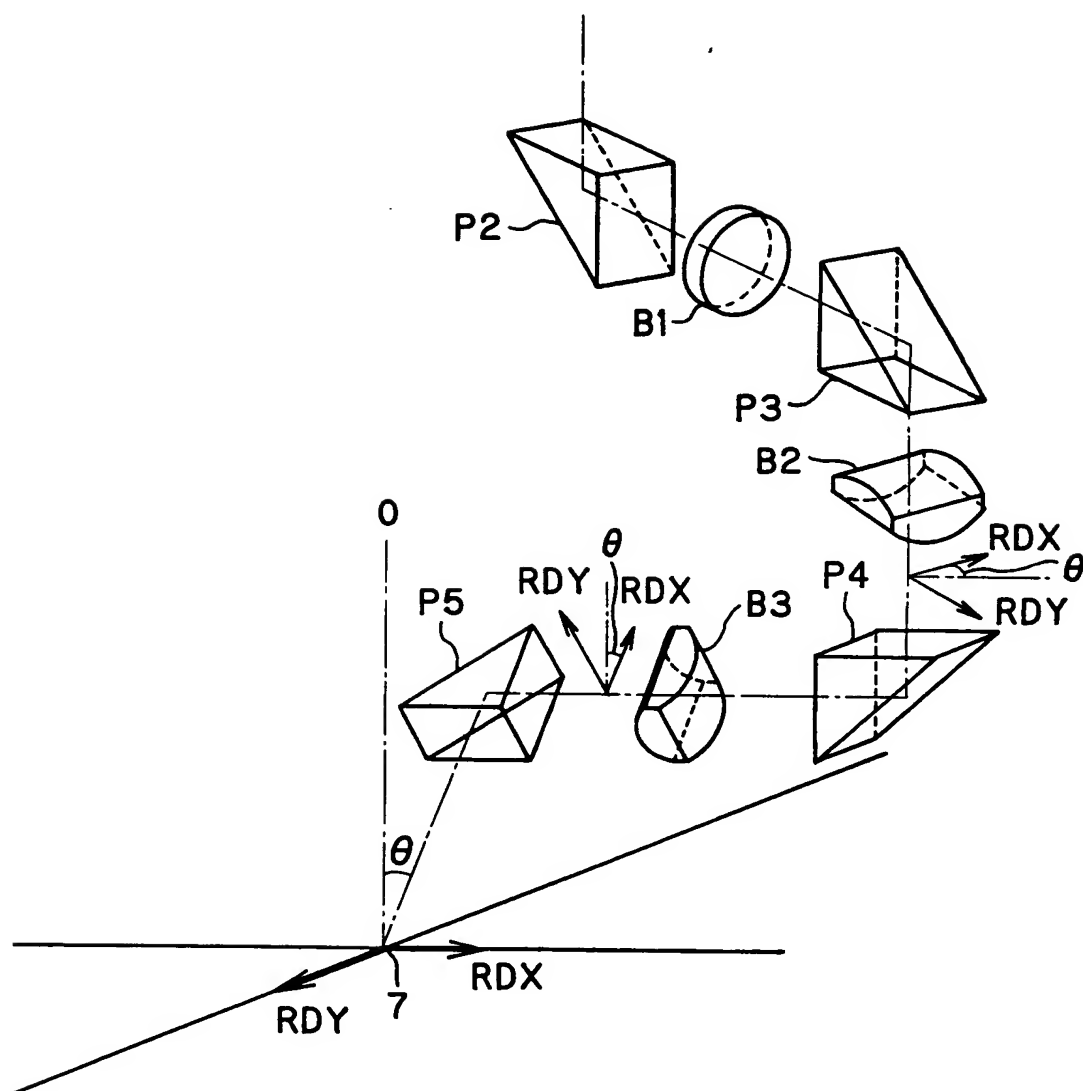
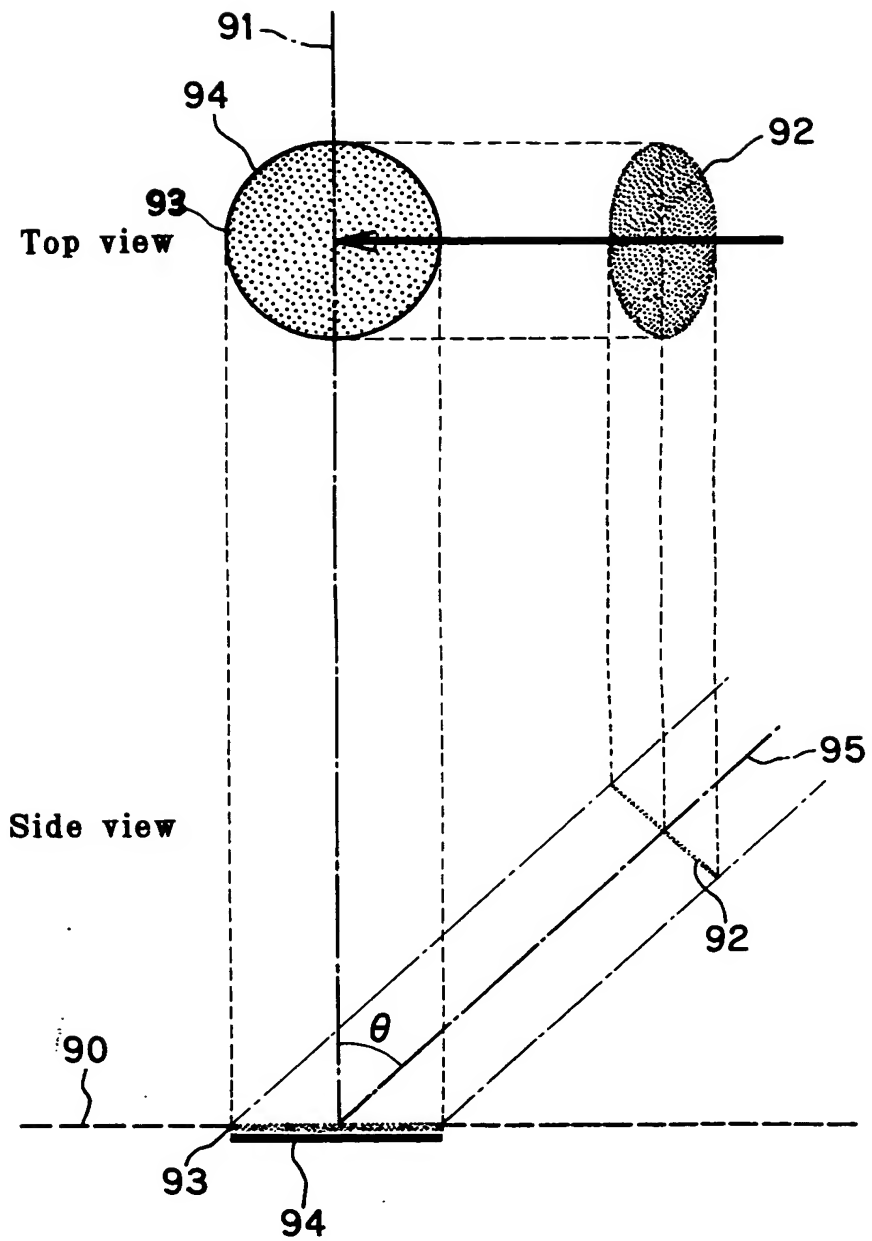


FIG. 39



C



FIG. 41(a)

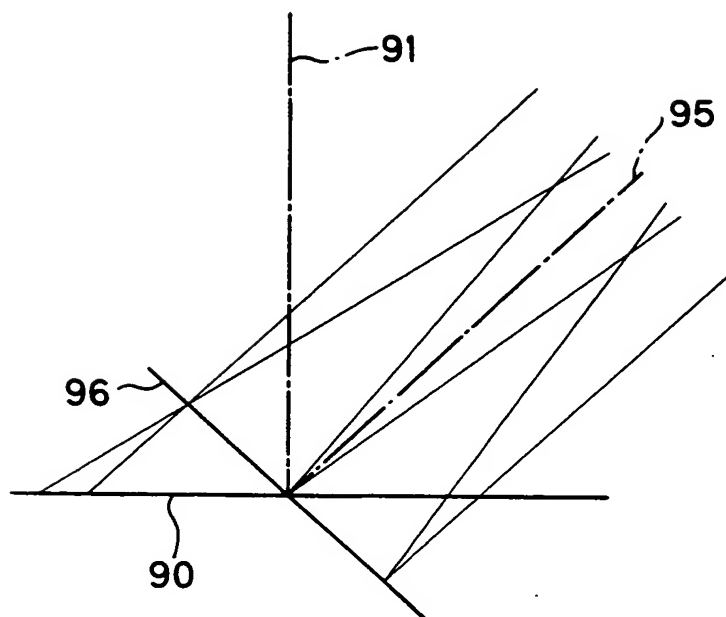
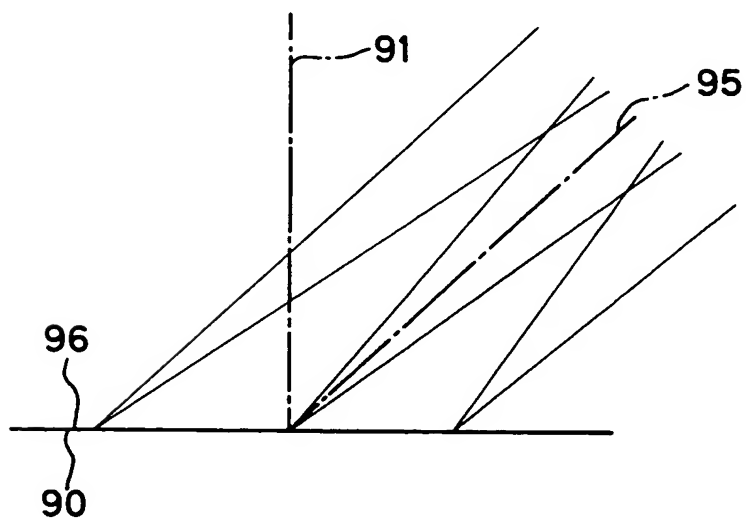


FIG. 41(b)



A schematic diagram of a vertical assembly. A dashed rectangular box at the top contains two horizontal double-headed arrows, labeled 4 and 3 from top to bottom. Below this box is a small horizontal rectangle labeled 5. Further down is a vertical rectangle labeled 2, followed by a smaller square labeled 6. At the bottom is a large square labeled 1. A vertical dashed line passes through the center of all components. A bracket labeled 7 is at the very bottom, indicating the base of the assembly.

FIG. 1 is a schematic diagram of a scanning electron microscope (SEM) system. The diagram shows a cross-sectional view of the instrument. At the top, a column (11) houses a high-voltage power supply (13) and a beam gun (15) which emits an electron beam (16). The beam passes through a deflector (14) and a series of lenses (B1, B2) and apertures (P2, P3) to form a probe (7) on a specimen (10). A detector (19) is positioned to receive secondary electrons (M3) emitted from the specimen. The system is supported by a base (2). Various components are labeled with numbers 1 through 19.

FIG. 44

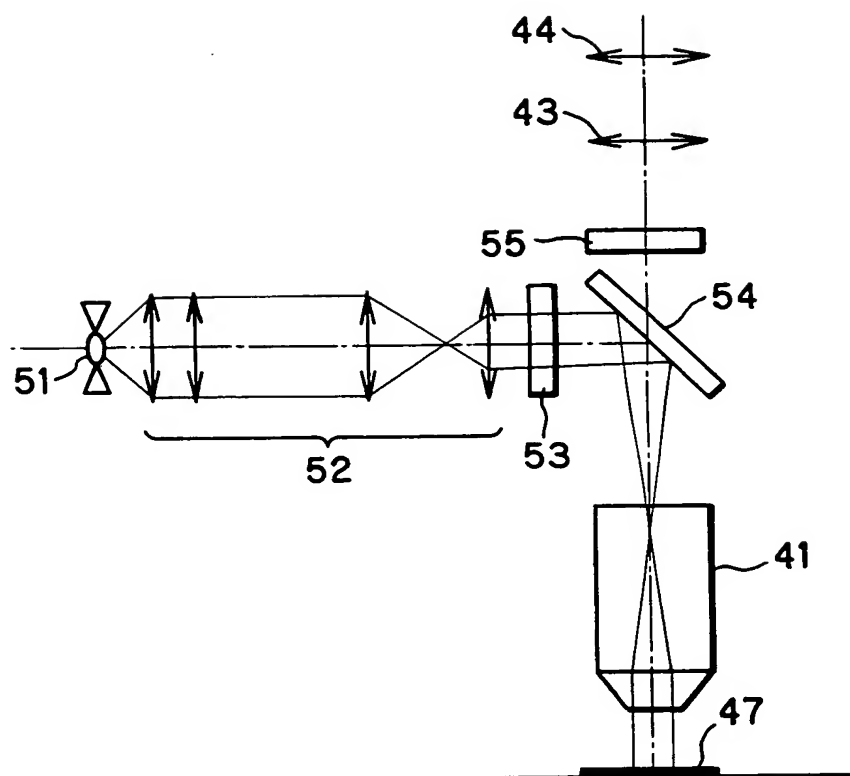


FIG. 45

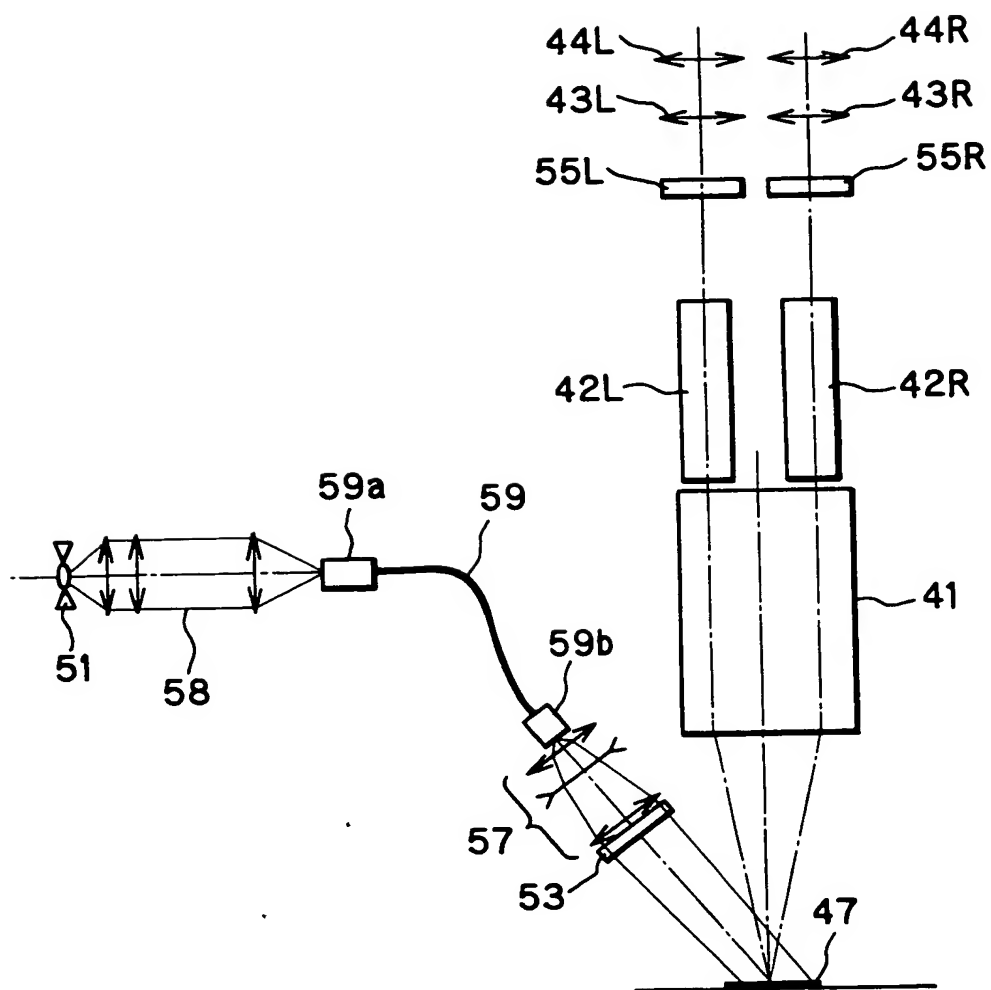


FIG. 46(a)

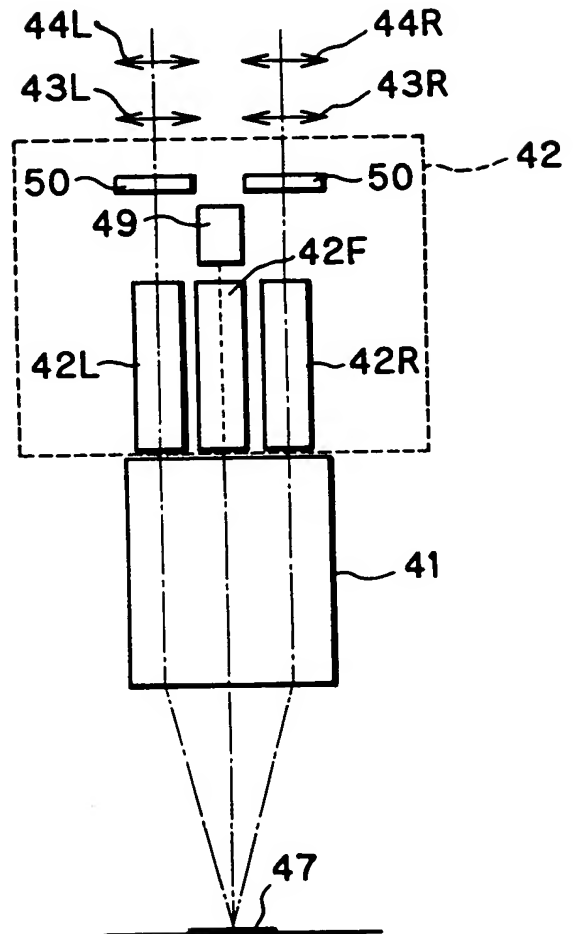


FIG. 46(b)

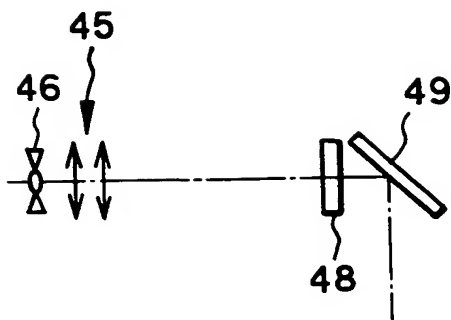


FIG. 46(c)

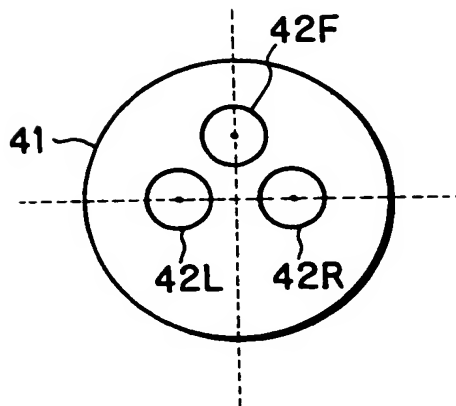


FIG. 47

